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Lexicon-Medicum;

OR

MEDICAL DICTIONARY;

CONTAINING AN

EXPLANATION OF THE TERMS

IN

ANATOMY,
PHYSIOLOGY,
PRACTICE OF PHYSIC,
MATERIA MEDICA,
CHEMISTRY,
PHARMACY,
SURGERY,
MIDWIFERY,

AND THE

VARIOUS BRANCHES OF NATURAL PHILOSOPHY CONNECTED
WITH MEDICINE.

SELECTED, ARRANGED, AND COMPILED, FROM THE BEST AUTHORS.

THE FOURTH EDITION.

> "Nec aranearum sane texus ideo melior, quia ex se fila
> gignunt, nec noster vilior quia ex alienis libamus ut apes."
> Just. Lips. *Monit. Polit.* Lib. i. cap. i.

By ROBERT HOOPER, M.D. F.L.S.

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THIS WORK

IS DEDICATED,

AS

A MARK OF RESPECT AND ESTEEM,

BY

HIS SINCERE FRIEND,

THE AUTHOR.

PREFACE.

In offering another edition of the Medical Dictionary to the public, the Editor, desirous of rendering it as generally useful as possible, has made considerable additions and alterations by the insertion of the treatment of diseases, the Biography of eminent Medical Men, and the pronunciation of the several terms.

Due attention has been given to the anatomical description of the various parts of the human body, and the explanation of their functions.

The most approved nosological arrangement of the diseases is selected, and their genera and species fully enumerated.

Particular attention has been given to the Materia Medica which is arranged under the Linnæan genera; the preparations which enter the last edition of the London Pharmacopœia are minutely mentioned, and the later discoveries in chemistry inserted.

The derivation of the terms, however fanciful, is still retained, and the declension of the words which are in common use is given.

The Compiler has generally to acknowledge his obligations to Abernethy, Accum, Aiken, Albinus, Bell, Brande, Bergius, Blanchard, Burns, Burserius, Callisen, Castelli, Chaptal, Cooper, Cruickshank, Cullen, Davy, Denman, Duncan, Edinburgh Dispensary, Editors of Rees' Cyclopœdia, and Motherley's Dictionary, Fourcroy, Haller, Hunter, Innis, Latta, Lavoisier, Lewis, Linnæus, Meyer, Murray, Nicholson, Pott, Richerard, Richter, Saunders, Sauvage, Scarpa, Smith, Soemmering, Swediaur, Symonds, Thomas, Thompson, Turton, Vaughan, Vossius, Willan, Willson, Woodville.

It was the Editor's original intention to have given to each writer the merit of the particular description selected from his work, but having occasion to consult, frequently to abridge, and sometimes to alter various passages in works connected with the subject; and finding it difficult, and in many instances, impossible, to discover the original writer of several articles; and, convinced at the same time it would be attended with no particular advantage, he prefers making a general acknowledgement to particularising the labours of each individual. If he has been so fortunate as to have compressed within the narrow limits of the present publication much general and useful information, his object will be fully answered.

21. Savile-Row,
June 1820.

A NEW

MEDICAL DICTIONARY.

A. AA. ANA. (From *ανα*, which signifies of each.) A term in pharmacy, used after the mention of two or more ingredients, when it implies, that the quantity mentioned of each ingredient should be taken; e. g. ℞. *Potassæ nitratis: Sacchari albi* āā ʒj. *i. e.* Take nitrate of potash and white sugar, of each one drachm.

A′bam. A term used by some antient chymists for lead.

AA′RON. A physician of Alexandria, author of thirty books in the Syriac tongue, containing the whole practice of physic, chiefly collected from the Greek writings, and supposed to have been written before 620. He first mentioned, and clearly described, the small-pox and measles, which were probably brought thither by the Arabians. He directed the vein under the tongue to be opened in jaundice, and noticed the white colour of the fæces in that disease. His works are lost, except some fragments, preserved by Rhazes.

Aba′ctus. *Abigeatus.* Among the antient physicians, this term was used for a miscarriage, procured by art, or force of medicines, in contradistinction to *abortus*, which meant a natural miscarriage. The moderns know no such distinctions.

A′bacus. (From a Hebrew word, signifying dust.) A table for preparations, so called from the usage of mathematicians of drawing their figures upon tables sprinkled with dust.

Abai′sir. *Abasis. Spodium. Arabum.* Ivory black; and also calcareous powder.

Abaliena′tio. A decay of the body, or mind.

Abaliena′tus. Corrupted. A part so destroyed as to require immediate extirpation; also the fault or total destruction of the senses, whether external or internal, by disease.

A′banet. (Hebrew, the girdle worn by the Jewish priests.) A girdle-like bandage.

Aba′nga. *Ady.* The palm of the Island of St. Thomas, from which Thernal's restorative is prepared.

Abapti′sta. (From *α*, priv. and *βαπτω*, to plunge.) *Abaptiston.* The shoulders of the old trepan. This term is employed by Galen, Fabricius ab Aquapendente, Scultetus, and others, to denote the conical saw with a circular edge, (otherwise called modiolus, or terebra,) which was formerly used by surgeons to perforate the cranium.

Abapti′ston. See *Abaptista.*

Abarnahas. *Ovum ruffum.* A chemical term formerly used in the transmutation of metals, signifying *luna plena, magnes,* or *magnesia.*

Aba′rtamen. Lead.

Abarticulation. (From *ab*, and *articulus*, a joint.) That species of articulation which has evident motion. See *Diarthrosis.*

A′bas. (An Arabian word.) The scald-head; also epilepsy.

Aba′sis. See *Abaisir.*

Abbreviation. The principal uses of medicinal abbreviations are in prescriptions; in which they are certain marks, or half words, used by physicians for dispatch and conveniency when they prescribe, thus: — ℞ readily supplies the place of *recipe* — *h. s.* that of *hora somni* — *n. m.* that of *nux moschata* — *elect.* that of *electarium*, &c.; and in general all the names of compound medicines, with the several ingredients, are frequently wrote only up to their first or second syllable, or sometimes to their third or fourth, to make them clear and expressive. Thus *Croc. Anglic.* stands for *Crocus Anglicanus* — *Conf. Aromat.* for *Confectio Aromatica*, &c. A point being always placed at the end of such syllable, shews the word to be incomplete.

ABDO′MEN. (*Abdomen, inis. n.* from *abdo*, to hide, because it hides the viscera. It is also derived from *abdere* to hide, and *omentum*, the caul; by others *omen* is said to be only a termination, as from *lego*, *legumen*, so from *abdo*, *abdomen.*) The belly.

The abdomen is the largest cavity in the body, bounded superiorly by the diaphragm, by which it is separated from the chest; inferiorly by the bones of the pubes and ischium; on each side by various muscles, the short ribs and ossa ilii; anteriorly by the abdominal muscles, and posteriorly by the vertebræ of the loins, the os sacrum and os coccygis. Internally it is invested by a smooth membrane, called peritoneum, and externally by muscles and common integuments.

In the cavity of the abdomen are contained,

1. *Anteriorly* and *laterally*.

1. The epiploon. 2. The stomach. 3. The large and small intestines. 4. The mesentery. 5. The lacteal vessels. 6. The pancreas. 7. The spleen. 8. The liver and gall-bladder.

2. *Posteriorly, without the peritoneum*, are,

1. The kidneys. 2. The supra-renal glands. 3. The ureters. 4. The receptaculum chyli. 5. The descending aorta. 6. The ascending vena cava.

3. *Inferiorly in the pelvis*, and *without the peritoneum*,

In men, 1. The urinary bladder. 2. The spermatic vessels. 3. The intestinum rectum.

In women, besides the urinary bladder and intestinum rectum, there are,

1. The uterus. 2. The four ligaments of the uterus. 3. The two ovaria. 4. The two Fallopian tubes. 5. The vagina.

The fore part of this cavity, as has been mentioned, is covered with muscles and common integuments, in the middle of which is the navel. It is this part of the body which is properly called abdomen; it is distinguished, by anatomists, into regions.

The posterior part of the abdomen is called the loins, and the sides the *Epicolic regions*.

Abdominal Hernia. See *Hernia abdominalis*.

Abdominal muscles. See *Muscles*.

Abdominal ring. See *Annulus Abdominis*.

Abdominal regions. See *Body*.

Abdu′cens. See *Abductor*.

Abdu′cens Labio′rum. See *Levator anguli oris*.

Abducent nerves. See *Nervi abducentes*.

Abducent muscles. See *Abductor*.

ABDU′CTOR. (From *abduco*, to draw away.) *Abducens*. A muscle, the office of which is to pull back or draw the member to which it is affixed from some other. The antagonist is called *adductor*.

Abductor auricularis. See *Posterior auris*.

Abductor auris. See *Posterior auris*.

Abductor brevis alter. See *Abductor pollicis manûs*.

ABDU′CTOR I′NDICIS MA′NUS. *Abductor* of Douglas. *Semi-interosseus indicis* of Winslow. *Abductor indicis* of Cowper.

An internal interosseous muscle of the fore-finger, situated on the hand. It arises from the superior part of the metacarpal bone, and the os trapezium, on its inside, by a fleshy beginning, runs towards the metacarpal bone of the fore-finger, adheres to it, and is connected by a broad tendon to the superior part of the first phalanx of the fore-finger. Sometimes it arises by a double tendon. Its use is to draw the fore-finger from the rest, towards the thumb, and to bend it somewhat towards the palm.

ABDU′CTOR I′NDICIS PE′DIS. An internal interosseous muscle of the fore-toe, which arises tendinous and fleshy, by two origins, from the root of the inside of the metatarsal bone of the fore-toe, from the outside of the root of the metatarsal bone of the great-toe, and from the os cuneiforme internum, and is inserted tendinous into the inside of the root of the first joint of the fore-toe. Its use is to pull the fore-toe inwards, from the rest of the small toes.

Abductor longus pollicis manûs. See *Extensor ossis metacarpi pollicis manûs*.

ABDU′CTOR ME′DII DI′GITI PE′DIS. An interosseous muscle of the foot, which arises tendinous and fleshy, from the inside of the root of the metatarsal bone of the middle toe internally, and is inserted tendinous into the inside of the root of the first joint of the middle toe. Its use is to pull the middle toe inwards.

ABDU′CTOR MI′NIMI DI′GITI MA′NUS. *Carpo-phalangien du petit doigt* of Dumas. *Extensor tertii internodii minimi digiti* of Douglas. *Hypothenar minor* of Winslow.

A muscle of the little finger, situated on the hand. It arises fleshy from the pisiform bone, and from that part of the *ligamentum carpi annulare* next it, and is inserted, tendinous, into the inner side of the upper end of the first bone of the little finger. Its use is to draw the little finger from the rest.

ABDU′CTOR MI′NIMI DI′GITI PE′DIS. *Calcaneo-phalangien du petit doigt* of Dumas. *Adductor* of Douglas. *Parathenar major* of Winslow, by whom this muscle is divided into two, *Parathenar major* and *metatarseus*. *Adductor minimi digiti* of Cowper.

A muscle of the little toe, which arises tendinous and fleshy, from the semicircular edge of a cavity on the inferior part of the protuberance of the os calcis, and from the rest of the metatarsal bone of the little toe, and is inserted into the root of the first joint of the little toe externally. Its use is to bend the little toe, and its metatarsal bone downwards, and to draw the little toe from the rest.

Abdu′ctor o′culi. See *Rectus externus oculi*.

ABDU′CTOR PO′LLICIS MA′NUS. *Scaphosus-phalangien du pouce* of Dumas. *Adductor pollicis manûs*, and *Adductor brevis alter* of Albinus. *Adductor thenar Riolani* of Douglas, (the *adductor brevis alter* of Albinus is the inner portion of this muscle.) *Adductor pollicis* of Cowper.

A muscle of the thumb, situated on the hand. It arises by a broad tendinous and fleshy beginning, from the *ligamentum carpi annulare*, and from the *os trapezium*, and is inserted tendinous into the outer side of the root of the first bone of the thumb. Its use is to draw the thumb from the fingers.

ABDU′CTOR POLLI′CIS PE′DIS. *Calcaneo-phalangien du pouce* of Dumas. *Abductor* of Douglas. *Thenar* of Winslow. *Abductor pollicis* of Cowper.

A muscle of the great toe, situated on the foot. It arises fleshy, from the inside of the root of the protuberance of the os calcis, where it forms the heel, and tendinous from the same bone, where it joins the os naviculare; and is inserted tendinous into the internal sesamoid bone and root of the first joint of the great toe. Its use is to pull the great toe from the rest.

ABDU′CTOR TE′RTII DI′GITI PE′DIS. An interosseous muscle of the foot, that arises tendinous and fleshy from the inside and the inferior part of the root of the metatarsal bone of the third toe; and is inserted tendinous into the inside of the root of the first joint of the third toe. Its use is to pull the third toe inwards.

Abebæ′os. (From α, neg. and βεβαιος, firm.) *Abebæus.* Weak, infirm, unsteady. A term made use of by Hippocrates de Signis.

Abebæ′us. See *Abebæos.*

Abelmo′schus. (Arabian.) The seeds of the *Hibiscus Abelmoschus.* See *Hibiscus.*

Abelmosch. See *Hibiscus.*

Abelmusk. See *Hibiscus.*

Aberra′tio (From *ab* and *erro*, to wander from.) *Lusus naturæ.* Dislocation.

Abe′ssi. (Arabian.) Filth. The alvine excrements.

A′besum. Quick lime.

Abevacua′tio. (From *ab*, dim. and *evacuo*, to pour out.) A partial or incomplete evacuation of the peccant humours, either naturally or by art.

A′BIES. (*Abies, etis*, fem. from *abeo*, to proceed, because it rises to a great height; or from απιος, a wild pear, the fruit of which its cones something resemble.) The fir. An evergreen tree. Linnæus includes the abies in the genus Pinus. See *Pinus.*

A′bies Canade′nsis. See *Pinus Balsamea.*

Abigea′tus See *Abactus.*

Abio′tos. (From α, neg. and βιοω, to live.) A name given to hemlock, from its deadly qualities. See *Conium.*

Ablacta′tio. (From *ab*, from, and *lac* milk.) *Ablactation.* The weaning of a child from the breast.

Abla′tio. (From *aufero*, to take away.) The taking away from the body whatever is useless or hurtful; it comprehends all kinds of evacuations. Sometimes it signifies the subtraction of a part of the diet, with a medical view; and sometimes it expresses the interval betwixt two fits of a fever, or the time of remission.

Chemical *ablation* is the removal of any thing that is either finished or else no longer necessary in a process.

Ablue′ntia. (*Abluentia*, sc. *medicamenta*, from *abluo*, to wash away.) *Abstergents. Abluents.* Medicines which were formerly supposed to purify or cleanse the blood.

ABLUTION. (From *abluo*, to wash off.) A washing or cleansing either of the body or the intestines.

In chemistry it signifies the purifying of a body, by repeated affusions of a proper liquor.

Abo′it. An obsolete term of Arabic extraction, for white lead.

Aboli′tio. (From *aboleo*, to destroy.) The separation or destruction of diseased parts.

ABORTION. (*Abortio*, from *aborior*, to be steril.) *Aborsus. Amblosis. Diaphthora. Ectrosis. Exambloma. Examblosis. Apopallesis. Apopalsis. Apophthora.*

Miscarriage, or the expulsion of the fœtus from the uterus, before the seventh month, after which it is called premature labour. It most commonly occurs between the eighth and eleventh weeks of pregnancy, but may happen at a later period. In early gestation, the ovum sometimes comes off entire; sometimes the fœtus is first expelled, and the placenta afterwards. It is preceded by flooding, pains in the back, loins, and lower part of the abdomen, evacuation of the water, shiverings, palpitation of the heart, nausea, anxiety, syncope, subsiding of the breasts and belly, pain in the inside of the thighs, opening and moisture of the os tincæ. The principal causes of miscarriage are blows or falls; great exertion or fatigue; sudden frights and other violent emotions of the mind; a diet too sparing or too nutritious; the abuse of spirituous liquors; other diseases, particularly fevers, and hæmorrhages; likewise excessive bleeding, profuse diarrhœa or colic, particularly from accumulated fæces; immoderate venery, &c. The spontaneous vomiting, so common in pregnancy, rarely occasions this accident: but when induced and kept up by drastic medicines, it may be very likely to have that effect. Abortion often happens without any obvious cause, from some defect in the uterus, or in the fœtus itself, which we cannot satisfactorily explain. Hence it will take place repeatedly in the same female at a particular period of pregnancy; perhaps in some measure from the influence of habit.

The treatment of abortion must vary considerably according to the constitution of the patient, and the causes giving rise to it. If the incipient symptoms should appear in a female of a plethoric habit, it may be proper to take a moderate quantity of blood from the arm, then clear the bowels by some mild cathartic, as the sulphas magnesiæ in the infusum rosæ, afterwards exhibiting small doses of nitrate of potash, directing the patient to remain quiet, in a recumbent position, kept as cool as possible, with a low diet, and the antiphlogistic regimen in other respects. Should there be much flooding, cloths wetted with cold water ought to be applied to the region of the uterus, or even introduced into the vagina, to obstruct the escape of the blood mechanically. Where violent forcing pains attend, opium should be given by the mouth, or in the form of glyster, after premising proper evacuations. Should these means not avail to check the discharge or the forcing pains, and particularly if the water be evacuated, there can be no expectation of preventing the miscarriage; and where there is reason for believing the fœtus dead, from the breasts having previously subsided, the morning sickness gone off, the motion stopped, &c. it will be proper rather to encourage it by manual assistance.

If on the other hand females of a delicate and irritable habit, rather deficient in blood, be subject to abortion, or where this accident is threatened by profuse evacuations and other debilitating causes, it may be more probably prevented by a diet nutritious, yet easy of digestion, with tonic medicines, and the use of the cold bath, attending at the same time to the state of the bowels, giving opium if pain attend, and carefully avoiding the several exciting causes.

Abortives. (*Abortiva,* sc. *medicamenta;* from *aborior,* to be steril.) *Amblotica. Ecbolica.*

Medicines capable of occasioning an abortion, or miscarriage, in pregnant women. It is now generally believed, that the medicines which produce a miscarriage, effect it by their violent action on the system, and not by any specific action on the womb.

Abra′sa. (From *abrado,* to shave off.) Ulcers attended with abrasion of part of the substance.

ABRASION. (*Abrasio,* from *abrado* to tear off.) This word is generally employed to signify the destruction of the natural mucus of any part, as the stomach, intestines, urinary bladder, &c. It is also applied to any part slightly torn away by attrition, as the skin, &c.

A′brathan. Corrupted from abrotanum, southernwood. See *Artemisia.*

A′brette. See *Hibiscus.*

A′bric. An obsolete Arabic term for sulphur.

Abro′ma. (From *α* neg. and *ϐϱωμα,* food; i. e. not fit to be eaten.) A tree of New South Wales, which yields a gum.

ABRO′TANUM. (*Αϐϱοτανον,* from *α,* neg. and *ϐϱοτος,* mortal; because it never decays: or from *αϐϱος,* soft, and *τονος,* extension; from the delicacy of its texture.) Common southernwood. See *Artemisia.*

Abro′tanum mas. See *Artemisia.*

Abrotoni′tes. (From *abrotanum.*) A wine mentioned by Dioscorides, impregnated with *abrotanum,* or southernwood, in the proportion of about one hundred ounces of the dried leaves, to about seven gallons of must.

Abscede′ntia. (From *abscedo,* to separate.) Decayed parts of the body, which, in a morbid state, are separated from the sound.

ABSCESS. (From *abscedo,* to depart; because parts, which were before contiguous, become separated, or depart from each other.) *Abscessio. Abscessus. Imposthuma.*

A collection of pus in the cellular membrane, or in the viscera, or in bones, preceded by inflammation.

Abscesses have been variously denominated according to their seat: as empyema, when in the cavity of the pleura; vomica, in the lungs; panaris, in any of the fingers; hypopyon, in the anterior chamber of the eye; arthropuosis, in a joint; also lumbar abscess, &c.

The formation of an abscess is the result of inflammation terminating in suppuration. This is known by a throbbing pain, which lessens by degrees, as well as the heat, tension, and redness of the inflamed part; and if the pus be near the surface, a cream-like whiteness is soon perceived, with a prominence about the middle, or at the inferior part, then a fluctuation may be felt, which becomes gradually more distinct, till at length the matter makes its way externally. When suppuration occurs to a considerable extent, or in a part of importance to life, there are usually rigors, or sudden attacks of chilliness, followed by flushes of heat; and unless the matter be soon discharged, and the abscess healed, hectic fever generally comes on. When abscesses form in the cellular membrane in persons of a tolerably good constitution, they are usually circumscribed, in consequence of coagulable lymph having been previously effused, and obliterated the communication with the adjoining cells; but in those of a weakly, and especially a scrophulous constitution, from this not occurring, the pus is very apt to diffuse itself, like the water in anasarca. Another circumstance, which may prevent its readily reaching the surface, is its collecting under an aponeurosis, or other part of dense structure, when the process of ulceration will rather extend in another direction. Thus pus accumulating in the loins, may descend to the lower part of the thigh.

When suppuration occurs, if the inflammation have not yet subsided, it may be necessary to employ means calculated to moderate this, in order to limit the extent of the abscess: but evacuations must not be carried too far, or there will not be power in the system to heal it afterwards. If the disease be near the surface, fomentations or warm emollient poultices should be employed, to take off the tension of the skin, and promote the process of ulceration in that direction. As soon as fluctuation is obvious, it will be generally proper to make an opening, lest contiguous parts of importance should be injured; and often at an earlier period, where the matter is prevented from reaching the surface by a fascia, &c. but it is sometimes advisable to wait awhile, especially in large spontaneous abscesses, where the constitution is much debilitated, till by the use of a nutritious diet, with bark and other tonic means, this can be somewhat improved. There are different modes of opening abscesses. 1. By incision or puncture; this is generally the best, as being least painful, and most expeditious, and the extent of the aperture can be better regulated. 2. By caustic; this may be sometimes preferable, when suppuration goes on very slowly in glandular parts, (especially in scrophulous and venereal cases) lessening the subjacent tumour, giving free vent to the matter, and exciting more healthy action in the sore; but it sometimes causes much deformity, it can hardly reach deepseated abscesses, and the delay may be often dangerous. 3. By seton; this is sometimes advantageous in superficial abscesses, (where suppuration is likely to continue,) about the neck and face, leaving generally but a small scar; likewise when near joints, or other important parts liable to be injured by the scalpel or seton. See *Lumbar Abscess*, and *Ulcer*.

Abscission. (*Abscissio*; from *ab*, and *scindo*, to cut.) *Apocope.* The taking away some morbid, or other part, by an edged instrument. The abscission of the prepuce makes what we call circumcision. Abscission is sometimes used by medical writers to denote the sudden termination of a disease in death, before it arrives at its decline. Celsus frequently uses the term *abscissa vox* to express a loss of voice.

ABSI'NTHIUM. (Αψινθιον, from *α*, neg. and *ψινθος*, pleasant: so called from the disagreeableness of the taste.) A genus of plants which is ranked under *Artemisia* in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*. Wormwood. See *Artemisia*.

Absi'nthium commune. See *Artemisia Absinthium*.

Absi'nthium maritimum. See *Artemisia Maritima*.

Absi'nthium po'nticum. See *Artemisia Pontica*.

Absi'nthium vulgare. See *Artemisia Absinthium*.

Absorbing vessels. See *Absorbents*.

ABSORBENTS. *Absorbentia.*

1. Small, delicate, transparent vessels, which take up any fluid from the surface of the body, or of any cavity in it, and carry it to be mixed with the blood. They are denominated according to the liquids which they convey, lacteals and lymphatics. See *Lacteals* and *Lymphatics*.

2. Medicines are so termed, which have no acrimony in themselves, and destroy acidities in the stomach and bowels; such are magnesia, prepared chalk, oyster-shells, crab's claws, &c.

ABSORPTION. (From *absorbeo*, to suck up.) A function in an animated body, arranged by physiologists under the head of natural actions. It signifies the taking up of substances applied to the mouths of absorbing vessels: thus the nutritious part of the food is absorbed from the intestinal canal by the lacteals: thus mercury is taken into the system by the lymphatics of the skin, &c. The principle by which this function takes place, is a power inherent in the mouths of the absorbents, a *vis insita*, dependent on the degree of irritability of their internal membrane by which they contract and propel their contents forwards.

Abste'ntio. Cælius Aurelianus uses this word, to express a suppression, or retention. Thus, *abstentio stercorum*, a retention of the excrements, which he mentions as a symptom very frequent in a satyriasis. In a sense somewhat different, he uses the word *abstenta*, applying it to the pleura, where he seems to mean, that the humour of the inflamed pleura is prevented, by the adjacent bones, from extending itself.

ABSTERGENTS. (*Abstergentia* scilicèt *medicamenta*; from *abstergo*, to cleanse away.) Lotions, or any application that cleanses or clears away foulness. The term is seldom employed by modern writers.

Abstraction. (From *abstraho*, to draw away.) A term employed by chymists in the process of humid distillation, to signify that the fluid body is again drawn off from the solid, which it had dissolved.

Abstracti'tius. (From *abstraho*, to draw away.) Native spirit, not produced by fermentation.

A'bsus. An obsolete term for the Egyptian lotus.

Abvacua'tio. (From *abvacuo*, to empty.) Local or morbid discharge. A large evacuation of any fluid, as of blood from a plethoric person.

Aca'ca. (From *α* neg. and *κακος*, bad.) Diseases which are rather troublesome than dangerous.

ACA'CIA. (Ακακια, from *ακαζω*, to sharpen.) The name of a genus of plants in the Linnæan system. The Egyptian thorn.

ACA'CIA CA'TECHU. This plant affords a drug, formerly supposed to be an earthy substance brought from Japan, and therefore called *Terra Japonica*, Japan earth; afterwards it appeared to be an extract, prepared in India, it was supposed till lately, from the juice of the *Mimosa catechu* of Linnæus: — *spinis stipularibus, foliis bipinnatis multijugis, glandulis partialium, singulis, spicis axillaribus geminis seu ternis pedunculatis*; by boiling the wood, and evaporating the decoction by the heat of the sun. But the shrub is now ascertained to be an acacia, and is termed *Acacia catechu*. In its purest state, it is a dry pulverable substance, outwardly of a reddish colour, internally of a shining dark brown, tinged with a reddish hue; in the mouth it discovers considerable adstringency, succeeded by a sweetish mucilaginous taste. It may be advantageously employed for most purposes where an adstringent is indicated; and is particularly useful in alvine fluxes, where astringents are required. Besides this, it is employed also in uterine profluvia, in laxity and debility of the viscera in general; and it is an excellent topical adstringent, when suffered to dissolve leisurely in the mouth, for laxities and ulcerations of the gums, aphthous ulcers in the mouth. and similar affections. This extract is the basis of several formulæ in our pharmacopœias, particularly of a tincture: but one of the best forms under which it can be exhibited, is that of a simple infusion in warm water with a proportion of cinnamon, for by this means it is at once freed of its impurities and improved by the addition of the aromatic. Fourcroy says that catechu is prepared from the seeds of a kind of palm, called areca.

Aca′cia Germa′nica. German acacia, or the German black-thorn or sloe-tree. *Acacia nostras. Succus pruni sylvestris.* The inspissated juice of the *prunus spinosa*, or *prunus sylvestris spinosa* of Linnæus; now fallen into disuse.

Aca′cia Indica. See *Tamarindus Indica.*

Aca′cia no′stras. See *Acacia Germanica.*

ACA′CIA VE′RA. True Acacia.

1. This is the name given by Wildenow to the *Mimosa Nilotica* of Linnæus; *spinis stipularibus patentibus, foliis bipinnatis: partialibus extimis glandula interstinctis, spicis globosis pedunculatis,* the Egyptian Thorn. This tree yields the true Acacia Gum, or Gum Arabic, called also *Gummi acanthinum. Gummi thebaicum. Gummi scorpionis. Gumlamac. Gummi senega,* or *senica.*

Cairo and Alexandria were the principal marts for gum-arabic, till the Dutch introduced the gum from Senegal into Europe, about the beginning of the seventeenth century, and this source now supplies the greater part of the vast consumption of this article.

The tree which yields the Senegal gum, grows abundantly on the sands, along the whole of the Barbary coast, and particularly about the river Senegal. There are several species, some of which yield a red astringent juice, but others afford only a pure, nearly colourless, insipid gum, which is the great article of commerce. These trees are from eighteen to twenty feet high, with thorny branches. The gum makes its appearance about the middle of November, when the soil has been thoroughly saturated with periodical rains. The gummy juice is seen to ooze through the trunk and branches, and, in about a fortnight, it hardens into roundish drops, of a yellowish white, which are beautifully brilliant where they are broken off, and entirely so when held in the mouth for a short time, to dissolve the outer surface. No clefts are made, nor any artificial means used by the Moors, to solicit the flow of the gum. The lumps of gum-senegal are usually about the size of partridge eggs, and the harvest continues about six weeks. This gum is a very wholesome and nutritious food; thousands of the Moors supporting themselves entirely upon it during the time of harvest. About six ounces is sufficient to support a man for a day; and it is besides, mixed with milk, animal broths, and other victuals.

The gum-arabic, or that which comes directly from Egypt and the Levant, only differs from the gum-senegal in being of a lighter colour, and in smaller lumps; and it is also somewhat more brittle. In all other respects, the two resemble each other perfectly.

Gum-arabic is neither soluble in spirit nor in oil; but, in twice its quantity of water, it dissolves into a mucilaginous fluid, of the consistence of a thick syrup, and in this state answers many useful pharmaceutical purposes, by rendering oily, resinous, and pinguious substances miscible with water. The glutinous quality of gum-arabic renders it preferable to other gums and mucilages as a demulcent in coughs, hoarsenesses, and other catarrhal affections. It is also very generally employed in ardor urinæ, diarrhœas, and calculous complaints.

2. The name Acacia vera has also been used to denote the expressed juice of the immature pods of the tree; termed also, *acacia veravel.* This inspissated juice is brought from Egypt in roundish masses, wrapped up in thin bladders. It is considered as a mild astringent medicine. The Egyptians give it, in spitting of blood, in the quantity of a drachm, dissolved in any convenient liquor, and repeat this dose occasionally. They likewise employ it in collyria, for strengthening the eyes, and in gargles, for quinsies. It is now seldom used as a medicine, being superseded by the use of catechu, or terra japonica.

The inspissated juice of the unripe sloe is usually sold for the Egyptian acacia.

Aca′cia veravel. See *Acacia vera.*

Aca′cia Zeylo′nica. Logwood. See *Hæmatoxylon Campechianum.*

Aca′lai. (Arab.) Common salt, or muriate of soda.

Aca′lcum. Tin.

Aca′matos. (From *α*, neg. and *καμνω*, to grow weary.) A perfect rest of the muscles.

Aca′nor. (Hebrew.) A chemical furnace.

Aca′ntha. (*Ακανθα*, from *ακη*, a point.) A thorn, or any thing pointed, as the shin, or spina dorsi.

Acantha′bolus. (From *ακανθα*, a thorn, and *βαλλω*, to cast out.) An instrument, or forceps, for taking out or removing thorns, or whatever may stick in the flesh. *Paulus Ægineta.*

Aca′nthe. The name of the artichoke in antient authors.

Aca′nthinum. (From *ακανθα*, a thorn.) Gum-arabic was so called because it is produced from a thorny tree.

Aca′nthulus. (From ακανθα, a thorn.) A surgical instrument to draw out thorns or splinters, or to remove any extraneous matter from wounds.

ACA′NTHUS. (Ακανθος, from ακανθα, a thorn; so named from being rough and prickly.) The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Angiospermia*. Bear's breech. Brank-ursine.

Acanthus mollis. (Ακανθος, from ακανθα, a thorn, so named from its rough and prickly surface.) Bear's-breech, or Brank-ursine. *Acanthus mollis, foliis sinuatis inermibus* of Linnæus. *Branca ursina* of the shops. The leaves and root abound with a mucilage, which is readily extracted by boiling or infusion. The roots are the most mucilaginous. Where this plant is common, it is employed for the same purposes to which althæa and other vegetables possessing similar qualities are applied among us. It is fallen into disuse. The herb-women too often sell the leaves of helleboraster or bear's-foot, and of spondylium or cow's parsnip, for the bear's-breech.

Aca′pnon. (From α, priv. and καπνος, smoke.) Common wild marjoram. Unsmoked honey.

A′carus. (From ακαρης, small.) An insect which breeds in the skin.

Acatale′psia. (From α, neg. and καταλαμβανω, to apprehend.) Uncertainty in the prognostication or judgment of diseases.

Aca′talis. (From α, neg. and χατεω, to want.) The juniper, named from the abundance of its seeds.

Acata′posis. (From α, neg. and καταπινω, to swallow.) Difficult deglutition.

Aca′statos. (From α, neg. and καθιϛημι, to determine.) Inconstant.

1. Fevers are so called which are anomalous in their appearance and irregular in their paroxysms.

2. Turbid urine without sediment.

Aca′zdir. Tin.

ACCELERA′TOR URI′NÆ. (From *accelero*, to hasten or propel.) *Ejaculator Seminis*. *Bulbo-syndesmo-caverneux* of Dumas. *Bulbo-cavernosus* of Winslow.

A muscle of the penis. It arises fleshy from the *sphincter ani* and membranous part of the urethra, and tendinous from the *crus*, near as far forwards as the beginning of the *corpus cavernosum penis*; the inferior fibres run more transversely, and the superior descend in an oblique direction. It is inserted into a line in the middle of the bulbous part of the urethra, where each joins with its fellow; by which the bulb is completely closed. The use of these muscles is to drive the urine or *semen* forward, and by grasping the bulbous part of the *urethra*, to push the blood towards its *corpus cavernosum*, and the glans, by which they are distended.

Accession. (From *accedo*, to approach.) The approach or commencement of a disease. A term mostly applied to a fever which has paroxysms or exacerbations: thus the accession of fever, means the commencement or approach of the pyrexial period.

ACCESSO′RII OF WILLIS. (*Accessorii*, sc. *nervi*, from *accedo*, to approach; having connection with by contact or approach; so called from the course they take.) The name given by Willis to two nerves, which ascend, one on each side from the second, fourth, and fifth cervical pairs of nerves, through the great foramen of the occipital bone, and pass out again from the *cranium* through the *foramina lacera*, with the *par vagum*, to be distributed on the trapezius muscle.

Accesso′rius. Being connected by contact or approach.

Accesso′rius lumba′lis. A muscle of the loins. See *Sacro-lumbalis*.

A′ccib. An obsolete term for lead.

Acci′piter. (From *accipio*, to take.)

1. The hawk; named from its rapacity.

2. A bandage which was put over the nose; so called from its likeness to the claw of a hawk, or from the tightness of its grasp.

Accipitri′na. (From *accipiter*, the hawk.) The herb hawk-weed, which Pliny says was so called because hawks are used to scratch it, and apply the juice to their eyes to prevent blindness.

Accli′vis. A muscle of the belly, so named from the oblique ascent of its fibres. See *Obliquus internus abdominis*.

Accoucheur. The French for a midwife.

Accouchement. The French for the act of delivery.

Accretion. (From *ad*, and *cresco*, to increase.)

1. Nutrition, growth.

2. The growing together of the fingers or toes.

Accuba′tio. (From *accumbo*, to recline.) Childbed. Reclining.

Ace′dia. (From α, priv. and κηδος, care.) Carelessness, neglect in the application of medicines. Hippocrates sometimes uses this word, in his Treatise on the Glands, to signify fatigue or trouble.

ACE′PHALUS. (Ακεφαλος,) from α, priv. and κεφαλη, a head.) A term applied to monsters born without heads.

A′CER. (*Acer, eris*, neut. from *Acer*, sharp; because of the sharpness of its juice.) The name of a genus of plants in the Linnæan system. Class, *Polygamia*. Order, *Monoecia*.

A′cer pseudopla′tanus. The maple-tree, falsely called sycamore. It is also called *Platanus traga*. This tree is common in England, though not much used in medicine. The juice, if drank while fresh, is said to be a good antiscorbutic. All its parts contain a saccharine fluid; and if the root or branches are wounded in the spring, a large quantity of liquor is discharged, which, when inspissated, yields a brown sort of sugar and syrup like molasses. Large quantities of this sugar are obtained from the trees in New England and Canada, which is much used in France, where it is commonly known by the name of *Saccharum Canadense* or *Saccharum Acernum*, maple sugar. It has been supposed that all Europe might be supplied from the maples of America, but the sugar is coarse and ill tasted.

ACE′RATOS. (From α, neg. and κεραω, or κεραννυμι, to mix.) Unmixed, uncorrupted. This term is applied sometimes to the humours of the body by Hippocrates. Paulus Ægineta mentions a plaster of this name.

ACERB. (*Acerbus*, from *acer*, sharp.) A species of taste which consists in a degree of acidity, with an addition of roughness; properties common to many immature fruits.

ACE′RBITAS. Acidity. Sourness.

ACE′RIDES. (From α, priv. and κηρος, wax.) Soft plasters made without wax.

ACESCENT. Substances which readily run into the acid fermentation.

A′CESIS. (From ακεομαι, to cure.)

1. A remedy or cure.

2. The herb water-sage, so called from its supposed healing qualities.

ACE′STA. (From ακεομαι, to cure.) Distempers which are easily cured.

ACE′STIS. Borax. See *Sodæ subboras*.

ACE′STORIS. (From ακεομαι, to cure.) It strictly signifies a female physician, and is used for a midwife.

ACE′STORIS. A midwife.

ACETA′BULUM. (From *acetum*, vinegar; so called because it resembles the *acetabulum*, or old saucer, in which vinegar was held for the use of the table.) A name given by Latin writers to the cup-like cavity of the os innominatum, which receives the head of the thigh-bone.

ACETA′RIA. (From *acetum*, vinegar; because they are mostly made with vinegar.) Salads or pickles.

ACE′TAS. An acetate. A salt is so called in the new chemical nomenclature and pharmacopœias, which is formed by the union of the acetic acid, with an earthy metallic or alkaline base. Those used in medicine are the acetates of ammonia, lead, potash, and zinc.

ACE′TAS AMMO′NIÆ. Acetate of ammonia. A salt composed of ammonia and acetic acid. It is so deliquescent, that it is always kept in the fluid state. See *Ammoniæ Acetatis Liquor*.

ACE′TAS PLU′MBI. Acetate of lead. A metallic salt composed of oxide of lead and acetic acid, of which there are two varieties. See *Plumbi Superacetas* and *Plumbi Subacetatis Liquor*.

Ace′tas pota′ssæ. See *Potassæ Acetas*.

ACE′TAS ZINCI. A metallic salt composed of zinc and acetic acid. It is used by some as an astringent against inflammation of the eyes, urethra, and vagina, diluted in the same proportion as the sulphate of zinc.

Acetate of Potash. See *Potassæ acetas.*

Acetate of Ammonia. See *Ammoniæ acetatis liquor.*

Acetate of Zinc. See *Acetas Zinci.*

Acetated vegetable Alkali. See *Potassæ acetas.*

Acetated volatile Alkali. See *Ammoniæ acetatis liquor.*

Acetic Acid. See *Acetum.*

ACETIFICATION. A term used by some chemists to denote the action or operation by which vinegar is made.

ACETO′SA. (From *acesco*, to be sour.) Sorrel. A genus of plants in some systems of botany. See *Rumex.*

ACETOSE′LLA. (From *acetosa*, sorrel; from the acidity of its leaves.) Wood-sorrel. See *Oxalis.*

Acetous Acid. Distilled vinegar. See *Acetum.*

Acetous fermentation. See *Fermentation.*

ACE′TUM. (From *acer*, sour.) Vinegar. A sour liquor obtained from many vegetable substances dissolved in boiling water, and from fermented and spirituous liquors, by exposing them to heat and contact with air; under which circumstances they undergo the acid fermentation, (see *Fermentation*,) and afford the liquor called vinegar.

Wine vinegar: — Let any quantity of vinous liquor be mixed with the acid and austere stalks of the vegetable from which wine was prepared. The whole must be frequently stirred, and either exposed to the sun, or deposited in a warm place: after standing a few days it will ferment, become sour, and in a fortnight it will be converted into vinegar.

Cyder vinegar, may be made by fermenting new cyder with the must of apples, in a warm room, or in the open air, where it should be exposed to the sun, and in the course of a week or nine days it will be fit for use.

Another method of preparing vinegar is that published by M. Heber: it consists in exposing a mixture of 72 parts of water, and 4 of rectified malt spirit in a temperature of from 70 to 80° of Fahrenheit, for about two months, at the expiration of which the acetous process will be effected.

Tarragon vinegar is manufactured by infusing one pound of the leaves of that vegetable (which has been gathered a short time before it flowers) in one gallon of the best vinegar, for the space of 14 days; when it should be strained through a flannel bag; and a drachm of isinglass dissolved in cyder must then be added, the whole be carefully mixed and decanted into bottles for a month. Thus the liquor will acquire a most exquisite flavour; it will become remarkably fine, and almost colourless.

The utility of vinegar as a condiment for preserving and seasoning both animal and vegetable substances in various articles of food, is very generally known. It affords an agreeable beverage, when combined with water in the proportion of a tablespoonful of the former to half a pint of the latter. It is often employed as a medicine in inflammatory and putrid diseases, when more active remedies cannot be procured. Relief has likewise been obtained in hypochondriacal and hysteric affections, in vomiting, fainting, and hiccough, by the application of vinegar to the mouth. If this fluid be poured into vessels and placed over the gentle heat of a lamp in the apartments of the sick, it greatly contributes to disperse foul or mephitic vapours, and consequently to purify the air.

Also as an external application, vinegar proves highly efficacious when joined with farinaceous substances, and applied as a cataplasm to sprained joints; it also forms an eligible lotion for inflammations of the surface, when mixed with alcohol and water in about equal proportions. Applied to burns and scalds, vinegar is said to be highly serviceable whether there is a loss of substance or not, and to quicken the exfoliation of carious bone. (Gloucester Infirmary.) Mixed with an infusion of sage, or with water, it forms a popular and excellent gargle for an inflamed throat, also for an injection to moderate the fluor albus. Applied cold to the nose in cases of hæmorrhage, also to the loins and abdomen in menorrhagia, particularly after parturition, it is said to be very serviceable. An imprudent use of vinegar internally is not without considerable inconveniencies. Large and frequent doses injure the stomach, coagulate the chyle, and produce not only leanness, but an atrophy. When taken to excess by females, to reduce a corpulent habit, tubercles in the lungs and a consumption have been the consequence.

Common vinegar consists of acetic acid combined with a large portion of water, and with this are in solution portions of gluten, mucilage, sugar, and extractive matter from which it derives its colour, and frequently some of the vegetable acids, particularly the malic and the tartaric.

Distilled with a gentle fire, in glass vessels, so long as the drops fall free from empyreuma, it affords the

Acidum aceticum.

"Take of vinegar, a gallon.

Distil the acetic acid in a sand bath, from a glass retort into a receiver also of glass, and kept cold; throw away the first pint, and keep for use the six succeeding pints, which are distilled over."

In this distillation, the liquor should be kept moderately boiling, and the heat should not be urged too far, otherwise the distilled acid will have an empyreumatic smell and taste, which it ought not to possess. If the acid be prepared correctly, it will be colourless, and of a grateful, pungent, peculiar acid taste. One fluid-ounce ought to dissolve at least ten grains of carbonate of lime (white marble). This liquor is the *acetum distillatum;* the *acidum acetosum* of the London Pharmacopœia of 1787, and the *acidum aceticum* of the last (1809)

When the acid of vinegar is greatly concentrated, that is, deprived of its water, it becomes the radical vinegar, or

Concentrated acid of vinegar.

Distilled vinegar may be concentrated by freezing: the congelation takes place at a temperature below 28 degrees, more or less, according to its strength; and the congealed part is merely ice, leaving, of course, a stronger acid. If this be exposed to a very intense cold, it shoots into crystals; which, being separated, liquefy, when the temperature rises; and the liquor is limpid as water, extremely strong, and has a highly pungent acetous odour. This is the pure acid of the vinegar, any foreign matter remaining in the uncongealed liquid.

Other methods are likewise employed to obtain the pure and concentrated acid. The process of Westendorf, which has been often followed, is to saturate soda with distilled vinegar, obtain the acetate by crystallization; and pour upon it, in a retort, half its weight of sulphuric acid. By applying heat, the acetic acid is distilled over; and, should there be any reason to suspect the presence of any sulphuric acid, it may be distilled a second time, from a little acetate of soda. According to Lowitz, the best way of obtaining this acid pure, is to mix three parts of the acetate of soda with eight of supersulphate of potass; both salts being perfectly dry, and in fine powder, and to distil from this mixture in a retort, with a gentle heat.

It may also be obtained by distilling the verdigris of commerce, with a gentle heat. The concentrated acid procured by these processes, was supposed to differ materially from the acetous acid obtained by distilling vinegar; the two acids were regarded as differing in their degree of oxygenizement, and were afterwards distinguished by the names of acetous and acetic acids. The acid distilled from verdigris was supposed to derive a quantity of oxygen from the oxide of copper, from which it was expelled. The experiments of Adet have, however, proved the two acids to be identical; the acetous acid, therefore, only differs from the acetic acid in containing more water, rendering it a weaker acid, and of a less active nature.

There exists, therefore, only one acid of vinegar, which is the acetic; and its compounds must be termed *acetates;* and the salts called *acetites* have no existence.

Acetic acid, when concentrated, has a fragrant and, at the same time, very penetrating smell, irritating the nostrils strongly. It is also so caustic, as to inflame the skin. Its acid taste is strong, even when much diluted with water; it is colourless, and has a specific gravity of 1,0626. The acid is capable of congelation, when it forms foliated arborescent crystals; it is very volatile; its odour is diffused through the atmosphere, and, when exposed to it, gradually becomes weaker. By a moderate heat, it is converted into vapour; this vapour readily catches fire on the approach of a lighted taper. It combines with water in every proportion; and it combines readily with earthy, metallic, and alkaline bases, forming salts, which are called acetates.

The compounds of the acid of vinegar, directed to be used by the new London Pharmacopœia, are *acetum colchici, acetum scillæ, ceratum saponis, plumbi superacetas, liquor ammoniæ acetatis, liquor plumbi subacetatis, liquor plumbi sub-acetatis dilutus, oxymel, oxymel scillæ, potassæ acetas*, and the *cataplasma sinapis*.

Ace´tum aroma´ticum. Aromatic vinegar. A preparation of the Edinburgh pharmacopœia, thought to be an improvement of what has been named *thieves vinegar*.

"Take of the dried tops of rosemary; The dried leaves of sage, of each four ounces. Dried lavender flowers, two ounces. Cloves, two drachms. Distilled vinegar, eight pounds. Macerate for seven days, and strain the expressed juice through paper." Its virtues are antiseptic, and it is a useful composition to smell at in crowded courts of justice, hospitals, &c. where the air is offensive.

Ace´tum co´lchici. See *Colchicum*.

Ace´tum distillatum. See *Acetum*.

Ace´tum sci´llæ. Lond. Pharm. Vinegar of squills. "Take of squills recently dried, one pound; vinegar, six pints; proof spirit, half a pint. Macerate the squills with the vinegar in a glass vessel, with a gentle heat for twenty-four hours; then express the liquor and set it aside until the fæces subside. To the decanted liquor add the spirit." This preparation of squills is employed as an attenuant, expectorant, and diuretic. Dose xv. to lx. drops.

A´cheir. (From α, neg. and χειρ, hand.) Without hands.

Achi´colum. By this word Cælius Aurelianus, Acut. lib. iii. cap. 17. expresses the fornix, tholus, or sudatorium of the antient baths, which was a hot room where they used to sweat.

ACHILLE´A. (Αχιλλεια, from Achilles, who is said to have made his tents with it, or to have cured Telephus with it.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order *Polygamia superflua*. Milfoil. Three species of this genus are employed in medicine.

1. Achille´a age´ratum. *Balsamita fœmina. Eupatorium Mesues.* Maudlin or Maudlin tansey. This plant, the ageratum of the shops, is described by Linnæus as *Achillea foliis lanceolatis, obtusis, acutoserratis.* It is esteemed in some countries as anthelminthic and alterative, and is given in hepatic obstructions. It possesses the virtues of tansey.

2. Achille´a millefo´lium. The systematic name of the milfoil. *Achillea. Myriophyllon. Chiliophyllon. Lumbus veneris. Militaris herba. Stratiotes. Carpentaria. Speculum veneris.* Common yarrow, or milfoil. The leaves and flowers of this indigenous plant, *Achillea millefolium* of Linnæus: —*foliis bipinnatis nudis; laciniis linearibus dentatis; caulibus superne sulcatis*, have an agreeable, weak, aromatic smell, and a bitterish, rough, and somewhat pungent taste. They are both directed for medicinal use, in the Edinburgh Pharmacopœia; in the present practice, however, they are almost wholly neglected.

3. Achille´a pta´rmica. The systematic name of the Sneeze-wort *Pseudopyrethrum. Pyrethrum sylvestre. Draco sylvestris. Tarchon sylvestris. Sternutamentoria. Dracunculus pratensis.* Sneeze-wort. Bastard pellitory. *Achillea ptarmica* of Linnæus: —*foliis lanceolatis, acuminatis, argute serratis.* The flowers and roots of this plant have a hot biting taste, approaching to that of pyrethrum, with which they also agree in their pharmaceutical properties. Their principal use is as a masticatory and sternutatory.

Achillea foliis pinnatis. See *Genipi verum.*

ACHI´LLIS TE´NDO. (So called, because, as fable reports, Thetis, the mother of Achilles, held him by that part when she dipped him in the river Styx, to make him invulnerable. Homer describes this tendon, and some writers suppose it was thus named by the antients, from their custom of calling every thing *Achillean*, that had any extraordinary strength or virtue. Others say it was named from its action in conducing to swiftness of pace, the term importing so much.) The strong and powerful tendon which is formed by the junction of the gastrocnemius and soleus muscles, and which extends along the posterior part of the tibia from the calf to the heel. When this tendon is unfortunately cut or ruptured, as it may be in consequence of a violent exertion, or spasm of the muscles, of which it is a continuation, the use of the leg is immediately lost, and unless the part be afterwards successfully united, the patient must remain a cripple for life. When the tendon has been cut, the division of the skin allows the accident to be seen. When the tendon has been ruptured, the patient hears a sound, like that of the smack of a whip, at the moment of the occurrence. In whatever way the tendon has been divided, there is a sudden incapacity, or at least an extreme difficulty, either of standing or walking. Hence the patient falls down, and cannot get up again. Besides these symptoms there is a very palpable depression between the ends of the tendon; which depression is increased when the foot is bent, and diminished, or even quite removed when the foot is extended. The patient can spontaneously bend his foot, none of the flexor muscles being interested. The power of extending the foot is still possible, as the peronei muscles, the tibialis posticus, and long flexors, remain perfect, and may perform this motion. The indications are to bring the ends of the divided parts together, and to keep them so, until they have become firmly united. The first object is easily fulfilled by putting the foot in a state of complete extension; the second, namely, that of keeping the ends of the tendon in contact, is more difficult. It seems unnecessary to enumerate the various plans devised to accomplish these ends. The following is Desault's method: After the ends of the tendon had been brought into contact by moderate flexion of the knee, and complete extension of the foot, he used to fill up the hollows on each side of the tendon with soft lint and compresses. The roller applied to the limb, made as much pressure on these compresses as on the tendon, and hence this part could not be depressed too much against the subjacent parts. Desault next took a compress about two inches broad, and long enough to reach from the toes to the middle of the thigh, and placed it under the foot, over the back of the leg and lower part of the thigh. He then began to apply a few circles of a roller round the end of the foot, so as to fix the lower extremity of the longitudinal compress: after covering the whole foot with the roller, he used to make the bandage describe the figure of 8, passing it under the foot and across the place where the tendon was ruptured, and the method was finished by encircling the limb upward with the roller as far as the upper end of the longitudinal compress.

A′CHLYS. (Αχλυς.) Darkness, cloudiness. It is generally applied to a close, foggy air, or a mist.

Hippocrates, De Morbis Mulierum, lib. ii. signifies by this word condensed air in the womb.

Galen interprets it of those, who, during sickness, lose that usual lustre and loveliness observed about the pupil of the eye during health.

Others express it by an ulcer on the pupil of the eye, or the scar left there by an ulcer.

It means also an opacity of the cornea; the same as the caligo cornea of Dr. Cullen.

ACHMA′DIUM. Antimony.

ACHME′LLA. See *Spilanthus*.

A′CHNE. Chaff, scum or froth of the sea. A white mucus in the fauces, thrown up from the lungs, like froth; also a whitish mucilage in the eyes of those who have fevers, according to Hippocrates. It signifies also lint.

A′CHOLUS. Deficient in bile.

A′CHOR. (αχωϱ, qu. αχνωϱ, from αχνη, bran; according to Blanchard it is derived from α, priv. and χωϱος space, as occupying but a small compass.) *Lactumen: abas: acores: cerion: favus. Crusta lactea* of authors. The scald-head; so called from the branny scales thrown off it. A disease which attacks the hairy scalp of the head, for the most part of young children, forming soft and scaly eruptions. Dr. Willan, in his description of different kinds of pustules, defines the achor, a pustule of intermediate size between the phlyzacium and psydracium, which contains a straw-coloured fluid, having the appearance and nearly the consistence of strained honey. It appears most frequently about the head, and is succeeded by a dull white or yellowish scab. Pustules of this kind, when so large as nearly to equal the size of phlyzacia, are termed ceria or favi, being succeeded by a yellow, semi-transparent, and sometimes, cellular scab, like a honey-comb. The achor differs from the favus and tinea only in the degree of virulence. It is called favus when the perforations are large; and tinea when they are like those which are made by moths in cloth: but generally by tinea is understood a dry scab on the hairy scalp of children, with thick scales and an offensive smell. When this disorder affects the face, it is called crusta lactea or milk scab. Mr. Bell, in his treatise on Ulcers, reduces the tinea capitis and crusta lactea to the same species of herpes, *viz.* the herpes pustulosus, differing only in situation. See *Crusta Lactea.*

ACHORI′STOS. Inseparable. It is understood of accidents, symptoms, or signs, which are inseparable from particular things. Thus, a pungent pain in the side is an inseparable symptom of a pleurisy.

ACHREI′ON. Useless. It is applied by Hippocrates to the limbs which, through weakness, are become useless.

ACHROI′A. A paleness.

A′CHYRON, (αχυϱον.) This properly signifies bran or chaff, or straw.

Hippocrates, de Morbis Mulierum, most probably means by this word, bran. Achyron also signifies a straw, hair, or any thing that sticks upon a wall.

A′CIA. (From ακη, a point.) A needle with thread in it for chirurgical operations.

A′CICYS. It signifies weak, infirm, or faint, and in this sense it is used by Hippocrates, De Morb. lib. iv.

ACID. That which impresses upon the organs of taste a sharp or sour sensation. Acids are defined by modern chemists to be salts of a sour taste, changing the blue colour of various vegetable pigments to a red. The word *sour*, which is usually employed to denote the simple impression, or lively and sharp sensation produced on the tongue by certain bodies, may be regarded as synonymous to the word *acid*. The only difference which can be established between them is, that the one denotes a weak sensation, whereas the other comprehends all the degrees of force from the least perceptible to the greatest degree of causticity: thus we say that verjuice, gooseberries, or lemons, are *sour;* but we use the word acid to express the impression which the nitric, sulphuric, or muriatic acids make upon the tongue. The vegetable pigments usually employed to ascertain the presence of acids are tincture of turnsole or litmus, and syrup of violets. Acids readily combine with alkalis, earths, and metallic oxides, and form neutral salts. The characteristics, therefore, of an acid, are,

1. A peculiar taste termed acid.

2. Its changing blue vegetable juices red.

3. Combining with alkalis, earths, and metallic oxides.

Acids, according to the kingdom of nature in which they are found, are divided into mineral, vegetable, and animal.

The mineral acids as yet known, are the sulphuric or vitriolic, the nitric, muriatic, carbonic, boracic, fluoric, succinic, arsenic, molybdic, tungstic, and chromic.

The vegetable acids are, the acetic, oxalic, tartaric, pyrotartaric, gallic, citric, malic, benzoic, pyroligneous, pyromucous, camphoric, and kinic.

Of the animal acids there are seven, *viz.* the phosphoric, lactic, saccholactic, formic, prussic, bombic, and lithic, or uric.

Experiment proves that most acids consist of a peculiar body combined with the basis of oxygen gas: hence the origin of the word oxygen, which signifies the generation of acid, it being regarded as the *acidifying basis* or principle of acidity. The bodies which form the other constituents of acids, are regarded as the *acidifiable bases:* thus the principles of phosphoric acid are phosphorus and oxygen; those of carbonic acid, carbon and oxygen.

If an acid basis be perfectly saturated with oxygen, the acid, thus produced, is said to be perfect; but if the basis predominate, the acid is considered as imperfect. Modern chemists distinguish these by their termination: the former in Latin by the syllables ICUM, in English IC; and the latter in Latin by OSUM, and in English by OUS: thus the perfect acid of nitre is called *acidum nitricum,* or nitric acid; the imperfect acid of nitre, *acidum nitrosum,* or nitrous acid. If the acidifiable basis be combined with oxygen, yet without showing any of the properties of an acid, the product is then called an oxyd or oxide: thus iron heated and exposed to the air or water attracts the oxygen, and an oxyd of iron is formed. The various acids employed medicinally are, the acetic, benzoic, tartaric, carbonic, citric, muriatic, nitric, sulphuric and phosphoric. To these perhaps might be added the oxymuriatic, or oxygenated muriatic acid, which was maintained by Berthollet to be a compound of muriatic acid and oxygen; but Sir Humphrey Davy considering it as a simple substance, has termed it Chlorine; and it scarcely possesses the characters of an acid.

Acid, aerial. See *Carbonic acid.*

Acid acetic. See *Acetum.*

For the other Acids look to the word *Acidum.*

Acidifiable base. See *Acid.*

Acidifying base. See *Acid.*

ACIDIFICATION. The formation of an acid; also the impregnating of any thing with acid properties.

ACIDITY. *Aciditas.* Sourness.

ACIDS, ANIMAL. Those which are obtained from animals. See *Acid.*

ACIDS DULCIFIED. These are now called Æthers. See *Æther.*

ACIDS IMPERFECT. Those acids are so called in the chemical nomenclature, which are not fully saturated with oxygen. Their names are ended in Latin by *osum,* and in English by *ous:* e. g. acidum nitrosum, or nitrous acid.

ACIDS, MINERAL. Those acids which are found to exist in minerals, as the sulphuric, the nitric, &c. See *Acid.*

ACIDS, PERFECT. An acid is termed perfect in the chemical nomenclature, when it is completely saturated with oxygen. Their names are ended in Latin by *icum,* and in English by *ic:* e. g. *acidum nitricum* or *nitric acid.*

ACIDS, VEGETABLE. Those which are found in the vegetable kingdom, as the citric, malic, acetic, &c. See *Acid.*

ACIDULOUS WATERS. Mineral waters, which contain so great a quantity of carbonic acid gas, as to render them acidulous, or gently tart to the taste. See *Mineral waters.*

A'CIDUM ACE'TICUM. See *Acetum.*

A'CIDUM ACETO'SUM. See *Acetum.*

A'CIDUM ÆTHE'REUM. The sulphuric acid.

A'CIDUM ALUMINO'SUM. The sulphuric acid.

A'CIDUM ARSE'NICUM. See *Arsenic.*

A'CIDUM BENZO'ICUM. See *Benzoic acid.*

A'CIDUM BORA'CICUM. See *Boracic acid.*

A'CIDUM CARBO'NICUM. See *Carbonic acid.*

A'CIDUM CATHO'LICON. The acid of sulphur.

A'CIDUM CI'TRICUM. See *Citric acid.*

A'CIDUM MURI'ATICUM. See *Muriatic acid.*

A'CIDUM NI'TRICUM. See *Nitric acid.*

A'cidum Nítricum dilútum. Take of nitric acid a fluid ounce; distilled water nine fluid ounces. Mix them.

A'CIDUM NITRO'SUM. See *Nitrous acid.*

A'CIDUM PHOSPHO'RICUM. See *Phosphoric acid.*

A'CIDUM PRIMIGE'NIUM. The sulphuric acid.

A'CIDUM SUCCI'NICUM. See *Succinic acid.*

A'CIDUM SULPHU'REUM. See *Sulphurous acid.*

A'CIDUM SULPHU'RICUM. See *Sulphuric acid.*

A'CIDUM SULPHU'RICUM DILU'TUM. *Acidum vitriolicum dilutum. Spiritus vitrioli tenuis.* "Take of sulphuric acid a fluid ounce and a half; distilled water fourteen fluid ounces and a half. Add the water gradually to the acid."

A'CIDUM TARTA'RICUM. See *Tartaric acid.*

A'CIDUM VITRIO'LICUM. See *Sulphuric acid.*

A'CIDUM VITRIO'LICUM DILU'TUM. See *Acidum sulphuricum dilutum.*

A'CIES. Steel.

ACINE'SIA. A loss of motion and strength.

A'CINI BILIO'SI. (*Acinus,* a grape-stone; so called from their supposed resemblance.) The small glandiform bodies of the liver, which separate the bile from the blood, were formerly so called: they are now, however, more properly termed *penicilli.* See *Liver.*

ACINIFORM TUNIC. *Tunica acinosa.* The coat of the eye called the *uvea,* because the antients, who dissected brutes, observed that, in them, it was usually of the colour of an unripe grape.

A'CINUS. (A grape.) The glands which grow together in clusters are called by some *acini glandulosi.*

ACMA'STICOS. A species of synochus, wherein the febrile heat continues of the same tenour to the end. *Actuarius.*

A'CME. (From ακμη, a point.) The height or crisis of a disease. A term applied by physicians to that period or state of a disease in which it is at its height. The antients distinguished diseases into four stages: 1. the *arche,* the beginning or first attack. 2. *Anabasis,* the growth. 3. The *acme,* the height. 4. *Paracme,* or the decline of the disease.

ACME'LLA. See *Spilanthus.*

A'CNE. *Acna.* (ἄκνη.) A small pimple, or hard tubercle on the face. Foesius says, that it is a small pustule or pimple, which arises usually about the time that the body is in full vigour.

ACNE'STIS. (From α, priv. and κναω, to scratch.) That part of the spine of the back, which reaches from the metaphrenon, which is the part betwixt the shoulder-blades, to the loins. This part seems to have been originally called so in quadrupeds only, because they cannot reach it to scratch.

A'COE. (Ακοη.) The sense of hearing.

ACOE'LIUS. (From α, priv. and κοιλια, the belly.) Without belly. It is applied to those who are so wasted, as to appear as if they had no belly. *Galen.*

ACOE'TUS. (Ακοιτος.) An epithet for honey, mentioned by Pliny; because it has no sediment, which is called κοιτη.

ACO'NION. (Ακονιον.) A particular form medicine among the antient physicians, made of powders levigated, and probably like *collyria* for the disorders of the eyes.

ACONI'TUM. (Of this plant various derivations are given by etymologists; as, ακονη a *whetstone* or *rock,* because it is usually found in barren and rocky places: α, neg. and κονις, *dust;* because it grows without earth, or on barren situations: ακοναω, *to sharpen;* because it was used in medicines intended to quicken the sight: ακων, ακη, a *dart;* because they poison darts therewith: or, ακονιζομαι, to accelerate; for it hastens death.) Aconite. Wolf's-bane. Monk's-hood.

1. A genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Trigynia.*

2. The pharmacopœial name of the common, or blue, wolf's-bane.

All the species of this genus of plants have powerful effects on the human body: two are preferred to the rest for medicinal uses.

1. ACONITUM RUPELLUS. Monk's-hood. Aconite. *Camarum. Canicida. Cynoctonum.*

Aconitum: —foliorum laciniis linearibus, supernè latioribus, lineâ exaratis.

The aconite is cultivated in our gardens as an ornament, but is spontaneously produced in Germany, and some other northern parts of Europe. Every part of the plant is strongly poisonous, but the root is unquestionably the most powerful; and when first chewed, imparts a slight sensation of acrimony; but afterwards, an insensibility or stupor at the apex of the tongue, and a pungent heat of the lips, gums, palate, and fauces are perceived, followed with a general tremor and sensation of chilliness. The juice applied to a wound, seemed to affect the whole nervous system; even by keeping it long in the hand, or on the bosom, we are told, unpleasant symptoms have been produced. The fatal symptoms brought on by this poison are, convulsions, giddiness, insanity, violent purgings, both upwards and downwards, faintings, cold sweats, and death itself. Dr. Stoerk appears to be the first who gave the wolf's-bane internally, as a medicine; and since his experiments were published, 1762, it has been generally and successfully employed in Germany and the northern parts of Europe, particularly as a remedy for obstinate rheumatisms; and many cases are related where this disease was of several years duration, and had withstood the efficacy of other powerful medicines, as mercury, opium, antimony, cicuta, &c. yet, in a short time, was entirely cured by the aconitum. Instances are also given us of its good effects in gout, scrophulous swellings, venereal nodes, amaurosis, intermittent fevers, paralysis, ulceration, and scirrhus. This plant has been generally prepared as an extract or inspissated juice, after the manner directed in the pharmacopœia: its efficacy is much diminished on being long kept. Like all virulent medicines, it should first be administered in small doses. Stoerk recommends two grains of the extract to be rubbed into a powder, with two drachms of sugar, and to begin with ten grains of this powder, two or three times a day. We find, however, that the extract is often given from one grain to ten for a dose; and Stoll, Scherekbecker, and others, increased this quantity considerably. Instead of the extract, a tincture has been made of the dried leaves, macerated in six times their weight of spirits of wine, and forty drops given for a dose. Some writers say that the napellus is not poisonous in Sweden, Poland, &c. but it should be noted that the species which is not poisonous, is the Aconitum lycoctonum of Linnæus.

2. Aconi′tum a′nthora. The root is the part of this plant (*Aconitum anthora; floribus pentagynis, foliorum laciniis linearibus* of Linnæus,) which is employed medicinally. Its virtues are similar to those of the *aconitum napellus.*

Aco′nium. A little mortar.

A′copon. (From α, priv. and κοπος, weariness.) It signifies originally whatever is a remedy against weariness, and is used in this sense by Hippocrates. Aph. viii. lib. ii. But in time, the word was applied to certain ointments. According to Galen and Paulus Ægineta, the *Acopa Pharmaca* are remedies for indispositions of body which are caused by long or vehement motion.

A′cor. Acidity. It is sometimes used to express that sourness in the stomach contracted by indigestion, and from whence flatulencies and acid belching arise.

Aco′rdina. An obsolete term for Indian tutty.

Aco′ria. (From α, priv. and κορεω, to satiate.) Insatiability. In Hippocrates, it means a good appetite and digestion.

Acori′tes vinum. (From ακορον, galangal.) A wine mentioned by Dioscorides, made with galangal, liquorice, &c. infused with wine.

ACORN. The fruit of the oak. See *Quercus.*

Acortinus. A lupin.

A′CORUS. (Ακορον, from κορη, the pupil; because it was esteemed good for disorders of the eyes.) The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Digynia.* Sweet-flag. Sweet-rush. The following species is used medicinally.

A′corus ca′lamus. The systematic name for the calamus aromaticus. *Acorus verus. Calamus odoratus. Calamus vulgaris. Diringa. Jacerantatinga. Typha aromatica. Clava rugosa.* Sweet-flag, or acorus. *Acorus calamus scapi mucrone longissimo foliaceo* of Linnæus. The root has been long employed medicinally. It has a moderately strong aromatic smell, and a warm, pungent, bitterish taste; and is deemed useful as a warm stomachic. Powdered, and mixed with some absorbent, it forms a useful and pleasant dentifrice.

A′corus palu′stris. See *Iris palustris.*

A′corus ve′rus See *Acorus Calamus.*

A′corus vulga′ris. See *Iris palustris.*

A′cos. (From ακεομαι, to heal.) A remedy or cure.

Aco′smia. (From α, neg. and κοσμος, beautiful.) Baldness; ill health: irregularity, particularly of the critical days of fevers.

Aco′ste. (From ακοςη, barley.) An antient food made of barley.

ACOU′STICA. (*Acoustica,* sc. *medicamenta;* ακουςικα from ακουω, to hear.) Remedies which are employed with a view to restore the sense of hearing, when wanting or diminished. No internal remedies of this kind are known to produce any uniform effect.

Acoustic nerves. See *Nerve* and *Portio mollis.*

Acoustic duct. The external passage of the ear.

ACOUSTICS. That branch of general science which treats on the origin, propagation, and perception of sound.

Acra. (Arab.) *Acrai nymphomania.* Excessive venereal appetite. The time of menstruation.

Acrai′pala. (From α, neg. and κραιπαλη, surfeit.) *Acræpalos.* Remedies for the effects of a debauch.

Acra′sia. (From α, and κεϱαω, to mix.) Unhealthiness; also the same with Acratia.

Acrati′a. (From α, and κϱατος, strength.) Weakness or intemperance.

Acrati′sma. (From ακρατον, unmixed wine.) A breakfast among the old Greeks, consisting of a morsel of bread, soaked in pure unmixed wine. The derivation of this word is the same as *Acrasia,* because the wine used on this occasion was not mixed with water.

Acrato meli. (From ακρατον, pure wine; and μελι, honey.) Mulsum, or wine mixed with honey.

A′cre. (From ακρος, extreme.) The extremity of the nose.

A′crea. (From ακϱος, extreme.) *Acroteria.* The extremities, i. e. the legs, arms, nose, and ears.

Acræ′palos. See *Acraipala.*

Acribei′a. (From ακριβης, accurate.) An exact and accurate description and diagnosis, or distinction, of diseases.

ACRID. (*Acris.*) A term employed in medicine to express a taste, the characteristic of which is pungency joined with heat.

ACRIMONY. (*Acrimonia,* from *acris,* acrid.) This term is used to express a quality in substances by which they irritate, corrode, or dissolve others. It has been supposed until very lately, there were acid and alkaline acrimonies in the blood, which produced certain diseases; and although the humoral pathology is nearly exploded, the term venereal acrimony and some others are still and must be retained.

A′cris. Any fractured extremity.

Acri′sia. (From α, priv. and κρινω, to judge or separate.) A turbulent state of a disease, which will scarcely suffer any judgment to be formed thereof.

A′critus. (From α, neg. and κρινω, to judge.) Disease without regular crisis, the event of which it is hazardous to judge.

Acroby′stia. (From ακρος, extreme, and βυω, to cover.) The extremity of the prepuce.

Acrocheire′sis. (From ακρος, extreme, and χειρ, a hand.) An exercise among the antients. Probably a species of wrestling, where they only held by the hands.

Acrochei′ris. (From ακρος, extreme, and χειρ, a hand.) Gorræus says, it signifies the arm from the elbow to the ends of the fingers; χειρ signifying the arm, from the scapula to the fingers' end.

Acrocho′rdon. (From ακρος, extreme, and χορδη, a string.) Galen describes it as a round excrescence on the skin, with a slender base; and that it hath its name because of its situation on the surface of the skin. The Greeks call that excrescence an *achrochordon*, where something hard concretes under the skin, which is rather rough, of the same colour as the skin, slender at the base, and broader above. Their size rarely exceeds that of a bean.

Acroco′lia. (From ακρος, extreme, and κωλον, a limb.) These are the extremities of animals, which are used in food, as the feet of calves, swine, sheep, oxen, or lambs, and of the broths of which, jellies are frequently made. Castellus from Budæus adds, that the internal parts of animals are also called by this name; in English *giblets*.

Achrole′nion. Castellus says it is the same as *Olecranon*.

Acroma′nia. (From ακρος, extreme, and μανια, madness.) Total or incurable madness.

Acro′mion. (From ακρον, extremity, and ωμος, the shoulder.) A process of the scapula or shoulder-blade. See *Scapula*.

Acrompha′lium. (Ακρομφαλον, from ακρος, extreme, and ομφαλος, the navel.) *Acromphalon*. The tip of the navel.

Acro′mphalon. See *Acromphalium*.

Acro′nia. (From ακρον, the extremity.) The amputation of any extremity, as a finger or toe.

Acro′pathos. (From ακρος, extreme, and ϖαθος, a disease.) *Acropathus*. It signifies literally a disease at the top or superior part. Hippocrates in his treatise De Superfœtatione applies it to the internal orifice of the uterus; and in Prædict. lib. ii. to cancers, which appear on the surface of the body.

Acro′pathus. See *Acropathos*.

A′cropis. (From ακρον, the extremity, and οψ, the voice.) Imperfect articulation, from a fault in the tongue.

Acropo′sthia. (From ακρος, extreme, and ϖοσθη, the prepuce.) The extremity of the prepuce; or that part which is cut off in circumcision.

Acro′psilon. (From ακρος, extreme, and ψιλος, naked.) The extremity of the denuded glans penis.

Acro′spelos. (From ακρος, extreme, and ϖελος, black.) *Acrospelus*. The bromus Dioscoridis, or wild oat grass; so called because its ears, or tops, are often of a blackish colour.

Acro′spelus. See *Acrospelos*.

Acrote′ria. (From ακρος, extreme.) The extreme parts of the body, as the hands, feet, nose, &c.

Acroteria′smus. (From ακροτηρια, extremities, and this from ακρος, *summus*.) The amputation of an extremity.

Acrothy′mion. (From ακρος, extreme, and ϑυμος, thyme.) *Acrothymia*. *Acrothymium*. A sort of wart, described by Celsus, as hard, rough, with a narrow basis, and broad top; the top is of the colour of thyme; it easily splits and bleeds. This tumour is also called *Thymus*.

Actæ′a. (From αγω, to break.) *Acte*. The elder-tree, so called from its being easily broken. See *Sambucus*.

A′ctine. The herb *Bunias* or *Napus*.

Actinoboli′smus. (From ακτιν, a ray, and βαλλω, to cast out.) Irradiation. It is applied to the spirits, conveying the inclinations of the mind to the body: it is also called *Diradiatio*.

ACTION. (From *ago*, to act.) Any faculty, power, or function of the body, which, by physiologists, are usually divided into vital, animal, or natural. The vital functions, or actions, are those which are absolutely necessary to life, and without which animals cannot exist; as the action of the heart, lungs, and arteries. The natural functions are those which are instrumental in repairing the several losses which the body sustains: digestion, and the formation of chyle, &c. fall under this head. The animal actions are those which we perform at will, as muscular motion, and all the voluntary motions of the body. Each part of the body is also said to have an action peculiar to itself.

ACTON WATER. A purging water procured from Acton, a village near London, where is a well that affords it. This is one of the strongest purging waters near London; and has been drank in the quantity of from one to three pints in a morning, against scorbutic and cutaneous affections. This medical spring is no longer resorted to by the public.

Actual. This word is applied to any thing endued with a property or virtue which acts by an immediate power inherent in it: it is the reverse of potential; thus, a red-hot iron or fire is called an actual cautery, in contradistinction from caustics, which are called potential cauteries. Boiling water is actually hot; brandy, producing heat in the body, is potentially hot, though of itself cold.

ACTUA′RIUS. This word was originally a title of dignity given to physicians at the court of Constantinople; but became afterwards the proper name of a celebrated Greek physician, John, (the son of Zachary, a Christian writer,) who flourished there about the 12th or 13th century. He is said to be the first Greek author who has treated of mild cathartics, as manna, cassia, &c. though they were long before in use among the Arabians. He appears also to have first noticed distilled waters. His works, however, are chiefly compiled from his predecessors.

Actuation. (From *ago*, to act.) That change wrought on a medicine, or any thing taken into the body, by the vital heat, which is necessary, in order to make it act and have its effect, is called its actuation.

Acu′itas. Acrimony.

Acui′tio. (From *acuo*, to sharpen.) The sharpening an acid medicine by an addition of something more acid; or, in general, the increasing the force of any medicine, by an addition of something that hath the same sort of operation in a greater degree.

A′culon. (From *α*, neg. and *κυλοω*, to roll round; so called because its fruit is not involved in a cup, or sheath, like others.) *Aculos.* The fruit or acorn of the ilex, or scarlet oak.

A′culos. See *Aculon.*

Acu′men. A point. The extremity of a bone.

Acupunctu′ra. (From *acus*, a needle, and *punctura*, a prick.) Acupuncture; bleeding performed by making many small punctures.

A′cureb. *Plumbum*, or lead.

A′curon. (From *α*, neg. and *κυρω*, to happen.) A name of the *Alisma;* so called because it produces no effect if taken internally.

Acuspasto′ris. A name of the *Scandix anthriscus*, the shepherd's needle, or Venus's comb. See *Scandix.*

Acute. *Morbus acutus.* A disease which is attended with violent symptoms, terminates in a few days, and is attended with danger. It is opposed to a chronic disease, which is slow in its progress, and not so generally dangerous.

Acutena′culum. (From *acus*, a needle, and *tenaculum*, a handle.) Heister calls the *portaiguille* by this name. It is the handle for a needle, to make it penetrate easily when stitching a wound.

Acy′isis. (From *α*, neg. and *κυω*, to conceive.) In Vogel's nosology it signifies a defect of conception, or barrenness in women.

A′cyrus. (From *α*, priv. and *κυρος*, authority; so named from its little note in medicine.) The *Arnica montana*, or German leopard's-bane. See *Arnica.*

Adæmo′nia. From *α*, priv. and *δαιμων*, a genius of fortune.) The restlessness and anxiety felt in acute fevers.

Adaiges. Sal-ammoniac, or muriate of ammonia. See *Murias ammoniæ.*

A′damas. (From *α*, neg. and *δαμαω*, to conquer; as not being easily broken.) The adamant or diamond, the most precious of all stones, and which was formerly supposed to possess extraordinary cordial virtues.

Adami′ta. *Adamitum.* A hard stone in the bladder.

Adam's Apple. See *Pomum Adami.*

Adam's needle. *Yucca gloriosa* of Linnæus. The roots of this plant are thick and tuberous, and are used by the Indians instead of bread; being first reduced into a coarse meal. This, however, is only in times of scarcity.

Adanso′nia. (From *Adanson* who first, described the Æthiopian sour gourd, a species of this genus.) *Baobab. Bahobab.* It grows mostly on the west coast of Africa, from the Niger to the kingdom of Benin. The bark is called *lalo;* the negroes dry it in the shade, then powder and keep it in little cotton bags, and put two or three pinches into their food. It is mucilaginous, and powerfully promotes perspiration. The mucilage obtained from this bark is a powerful remedy against the epidemic fevers of the country that produces these trees; so is a decoction of the dried leaves. The fresh fruit is as useful as the leaves, for the same purposes.

Ada′rces. (From *α*, neg. and *δερκω*, to see.) A saltish concretion found about the reeds and grass in marshy grounds in Galatia, and so called because it hides them. It is used to clear the skin with, in leprosies, tetters, &c. Dr. Plott gives an account of this production in his *Natural History of Oxfordshire.* It was formerly in repute for cleansing the skin from freckles.

Adari′ges. An ammoniacal salt.

Ada′rneck. Auripigmentum, or orpiment.

Adarticulation. See *Arthrodia.*

Addepha′gia. (From *ἁδην*, abundantly, and *φαγω*, to eat.) Insatiability. A voracious appetite. See *Bulimia.*

Additame′ntum. (From *addo*, to add.) A term formerly employed as synonymous with *epiphysis*, but now only applied to two portions of sutures of the skull. See *Lambdoidal* and *Squamous Sutures.*

Additame′ntum co′li. See *Appendicula cæci vermiformis.*

ADDU′CTOR. (From *ad* and *duco*, to draw.) A drawer or contractor. A name given to several muscles, whose office is to bring forwards or draw together those parts of the body to which they are annexed.

ADDU′CTOR BRE′VIS FE′MORIS. *Adductor femoris secundus* of Douglas. *Triceps secundus* of Winslow. A muscle, which, with the *adductor longus* and *magnus femoris*, forms the *triceps adductor femoris*. It is situated on the posterior part of the thigh, arising tendinous from the os pubis near its joining with the opposite os pubis below, and behind the *adductor longus femoris*, and is inserted, tendinous and fleshy, into the inner and upper part of the linea aspera, from a little below the trochanter minor, to the beginning of the insertion of the *adductor longus*. See *Triceps adductor femoris*.

Addu′ctor fe′moris pri′mus. See *Adductor longus femoris*.

Addu′ctor fe′moris secu′ndus. See *Adductor brevis femoris*.

Addu′ctor fe′moris te′rtius. See *Adductor magnus femoris*.

Addu′ctor fe′moris qua′rtus. See *Adductor magnus femoris*.

ADDU′CTOR I′NDICIS PE′DIS. An external interosseous muscle of the fore-toe, which arises tendinous and fleshy, by two origins, from the root of the inside of the metatarsal bone of the fore-toe, from the outside of the root of the metatarsal bone of the great toe, and from the os cuneiforme internum. It is inserted, tendinous, into the inside of the root of the first joint of the fore-toe. Its use is to pull the fore-toe inwards from the rest of the small toes.

ADDU′CTOR LO′NGUS FE′MORIS. *Adductor femoris primus* of Douglas. *Triceps minus* of Winslow. A muscle situated on the posterior part of the thigh, which, with the *adductor brevis*, and *magnus femoris*, forms the *triceps adductor femoris*. It arises by a pretty strong roundish tendon, from the upper and interior part of the os pubis, and ligament of its synchondrosis, on the inner side of the pectineus, and is inserted along the middle part of the linea aspera. See *Triceps adductor femoris*.

ADDU′CTOR MA′GNUS FE′MORIS. *Adductor femoris tertius et quartus* of Douglas. *Triceps magnus* of Winslow. A muscle which, with the *adductor brevis femoris*, and the *adductor longus femoris*, forms the *Triceps adductor femoris*. It arises from the symphysis pubis, and all along the flat edge of the thyroid foramen, from whence it goes to be inserted into the linea aspera throughout its whole length. See *Triceps adductor femoris*.

ADDU′CTOR MI′NIMI DI′GITI PE′DIS. An internal interosseous muscle of the foot. It arises, tendinous and fleshy, from the inside of the root of the metatarsal bone of the little toe. It is inserted, tendinous, into the inside of the root of the first joint of the little toe. Its use is to pull the little toe inwards.

Addu′ctor o′culi. See *Rectus internus oculi*.

Addu′ctor po′llicis. See *Adductor pollicis manûs*.

ADDU′CTOR PO′LLICIS MA′NUS. *Adductor pollicis*. *Adductor ad minimum digitum*. A muscle of the thumb, situated on the hand, which arises, fleshy, from almost the whole length of the metacarpal bone that sustains the middle finger; from thence its fibres are collected together. It is inserted, tendinous, into the inner part of the root of the first bone of the thumb. Its use is to pull the thumb towards the fingers.

ADDU′CTOR PO′LLICIS PE′DIS. *Antithenar* of Winslow. A muscle of the great toe, situated on the foot: it arises, by a long thin tendon, from the os calcis, from the os cuboides, from the os cuneiforme externum, and from the root of the metatarsal bone of the second toe. It is inserted into the external os sesamoideum, and root of the metatarsal bone of the great toe. Its use is to bring this toe nearer to the rest.

Addu′ctor pro′statæ. A name given by Sanctorini to a muscle, which he also calls *Levator prostatæ*, and which Winslow calls *Prostaticus superior*. Albinus, from its office, had very properly called it *compressor prostatæ*.

ADDU′CTOR TE′RTII DI′GITI PE′DIS. An external interosseous muscle of the foot, that arises, tendinous and fleshy, from the roots of the metatarsal bones of the third and little toe. It is inserted, tendinous, into the outside of the root of the first joint of the third toe. Its use is to pull the third toe outward.

A′dec. Sour milk, or butter-milk.

Ade′cia. See *Adectos*.

Ade′ctos. *Adecia*. (From α, priv. and δακνω, to bite.) An epithet of those medicines which relieve from pain, by removing the uneasy situation caused by the stimulus of acrimonious medicines.

Ade′lphia. (Ἀδελφια, a relation.) Hippocrates calls diseases by this name that resemble each other.

Ademo′nia. (From α, priv. and δαιμων, a genius or divinity or fortune.) Hippocrates uses this word for uneasiness, restlessness, or anxiety felt in acute diseases, and some hysteric fits.

A′DEN. (Αδην, a gland.) A gland. A bubo. See *Gland*.

Ade′niform. (*Adeniformis*; from *aden*, a gland, and *forma*, resemblance.) Glandiform, or resembling a gland. A term sometimes applied to the prostate gland.

Adende′ntes. An epithet applied to ulcers which eat and destroy the glands.

ADENO′GRAPHY. (From αδην, a gland, and γραφω, to write.) A treatise on the glands. See *Gland*.

Adenoi′des. Glandiform: resembling a gland. An epithet applied also to the prostate gland.

ADENO′LOGY. (From αδην, a gland, and λογος, a treatise.) The doctrine of the glands. See *Gland*.

Adenous abscess. (*Abscessus adenosus*; from αδην, a gland.) A hard glandular abscess, which suppurates slowly.

Adepha′gia. (From αδην, abundantly, and φαγω, to eat.) Insatiable appetite. See *Bulimia.*

A′DEPS. (*Adeps, ipis,* m. and f.) Fat. An oily secretion from the blood into the cells of the cellular membrane. See *Fat.*

A′DEPS ANSERI′NUS. Goose-grease.

A′DEPS SUI′LLA. Hog's-lard.

Ade′pta Medici′na. So Paracelsus calls that which treats of the diseases that are contracted by celestial operations, or communicated from heaven.

Ade′pta Philoso′phia. Adept philosophy. It is that philosophy, whose end is the transmutation of metals, and an universal remedy.

Adepts. (From *adipiscor,* to obtain.) Skilful alchymists. Such are called so as pretend to some extraordinary skill in chemistry; but these have too often proved either enthusiasts or impostors. The professors of the *Adepta Philosophia* are also called Adepts.

Adfla′tus. A blast: a kind of erysipelas.

Adhato′da. The Malabar nut-tree, which is a species of *Justicia.* It is used in India for expelling the dead fœtus in an abortion, which, it is said, is the meaning of the word in the Zeylanic language.

ADHÆSION. (From *adhæreo,* to stick to.) The growing together of parts.

ADHÆSIVE INFLAMMATION. A term lately introduced into Surgery, to express that species of inflammation which terminates by an adhesion of the inflamed surfaces.

Adhæsive plaster. A plaster made of common litharge plaster and resin, is so called because it is used for its adhesive properties. See *Emplastrum resinæ.*

Adiachy′tos. (From α, neg. and διαχὺω, to diffuse, scatter, or be profuse.) Decent in point of dress. Hippocrates thinks the dress of a fop derogatory from the physician, though thereby he hide his ignorance, and obtain the good opinion of his patients.

ADIA′NTHUM. (*Adiantum,* αδιαντον, from α, neg. and διαινω, to grow wet; so called, because its leaves are not easily made wet.) Maidenhair. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Filices.* The following species is used in medicine.

Adia′nthum capi′llus ve′neris. Maidenhair. The leaves of this plant are somewhat sweet and austere to the palate, and possess mucilaginous qualities. A syrup, the *syrop de capillaire* is prepared from them, which is much esteemed in France. Orange-flower water and a proportion of honey, it is said, are usually added. It acts chiefly as a demulcent, sheathing the inflamed sides of the glottis.

Adia′nthum au′reum. The golden maiden-hair. See *Polytrichum.*

Adiaphorous. A term which implies the same with neutral; and is particularly used of some spirits and salts, which are neither of an acid nor alkaline nature.

Adiapneu′stia. (From the privative particle α, and διαπνεω, *perspiro.*) A diminution or obstruction of natural perspiration, and that in which the antients chiefly placed the cause of fevers.

Adiarrhœ′a. From α, priv. and διαῤῥεω, to flow out or through.) A total suppression of all the necessary evacuations from the bowels.

Adiathorosus. A spirit distilled from tartar.

Adibat. Mercury.

A′dice. (Αδικη.) A nettle.

ADIPOCI′RE. (French, from *adeps,* fat, and *cera,* wax.) A substance that resembles ammoniacal soap, formed by a conversion of animal matter, placed under certain circumstances, was found by Fourcroy to consist of ammonia, united to a matter intermediate in its properties between fat and wax, which he called *Adipocire.* Whole bodies have been found converted into this substance.

Adipose membrane. (*Membrana adiposa,* from *adeps,* fat.) The fat collected in the cells of the cellular membrane. See *Fat.*

Adi′psa. So the Greeks called medicines, &c. which abate thirst. Hippocrates applied this word to oxymel.

ADI′PSIA. (From α, neg. and διψα, thirst.) A want of thirst. A genus of disease in the class *locales,* and order *dysorexiæ* of Cullen's Nosology. It is mostly symptomatic of some disease of the brain.

Adi′psos. So the Greeks called the Egyptian palm-tree, whose fruit is said to be the *Myrobalans.* The tree is called *adipsos,* because its fruit quencheth thirst. Theophrastus calls this tree *Balanos.* *Adipsos* is also a name for liquorice.

Adi′rige. Ammoniacal salt.

Adjuto′rium. (From *ad* and *juvo,* to help.) A name of the *humerus,* from its usefulness in lifting up the fore-arm.

Adjuva′ntia. Whatever assists in obviating disease.

ADNA′TA TU′NICA. (*Adnata,* from *adnascor,* to grow to.) *Albuginea oculi, Tunica albuginea oculi.* This membrane is mostly confounded with the *conjunctiva.* It is, however, thus formed: five of the muscles which move the eye, take their origin from the bottom of the orbit, and the sixth arises from the edge of it; they are all inserted, by a tendinous expansion, into the anterior part of the *tunica sclerotica;* which expansion gives the whiteness peculiar to the fore-part of the eye. It lies betwixt the *sclerotica* and *conjunctiva.*

A′doc. Milk.

Ado′nion. (From Αδωνις, the youth from whose blood it was feigned to have sprung.) *Adonium.* Southernwood.

ADO′PTER. *Tubus intermedius.* A

chemical instrument used to combine retorts to the cucurbits or matrasses in distillation, with retorts instead of receivers.

A′dor. A sort of corn, called also spelta.

A′dos. Water in which red-hot iron is extinguished.

Ad′po′ndus o′mnium. The weight of the whole. These words are inserted in pharmaceutical preparations, or prescriptions, when the last ingredient ought to weigh as much as all the others put together.

Adra rhi′za. Blancard says the root of the Aristolochia is thus named.

Adra′chne. The strawberry bay-tree. A species of *Arbutus.*

A′dram. Fossil salt.

Adrara′gi. (Indian.) Garden-saffron.

Adrobo′lon. (From *αδρος*, large, and *βωλος*, a globe, bole, or mass.) Indian bdellium, which is coarser than the Arabian.

Adstriction. Costiveness.

ADSTRINGENTS. See *Astringents.*

Adustion. An inflammation about the brain, and its membranes, with an hollowness of the eyes, a pale colour, and a dry body.

In surgery, adustion signifies the same as cauterization, and means the application of any substance to the animal body, which acts like fire. The antient surgeons, especially the Arabians, were remarkably fond of having recourse to adustion in local diseases: but the use of actual heat is very rarely admitted by the moderns.

Adventitious. Any thing that accidentally, and not in the common course of natural causes, happens to make a part of another; as the glands in strumous cases are said to be adventitious glands, in distinction from those which are naturally produced. It is also used in opposition to hereditary; thus gout and scrofula are sometimes hereditary, and very often adventitious, they having never before been known in the family.

A′dy. *Abanga.* The palm of the island of St. Thomas, from which is prepared Thernel's restorative.

ADYNA′MIA. (*Αδυναμια*: from *α*, priv. and *δυναμις*, power.) A defect of vital power.

ADYNA′MIÆ. (The plural of *Adynamia.*) The second order of the class *neuroses* of Cullen's Nosology: it comprehends *syncope, dyspepsia, hypochondriasis,* and *chlorosis.*

Ady′namon. (From *α*, neg. and *δυναμις*, strength.) *Adynamum.* Among antient physicians, it signified a kind of weak factitious wine, prepared from must, boiled down with water; to be given to patients to whom pure or genuine wine might be hurtful.

Ædoi′a. (From *αιδως*, modesty; or from *α*, neg. and *ειδω*, to see; as not being decent to the sight.) The pudenda, or parts of generation.

Ædopso′phia. (From *αιδοια*, *pudenda*, and *ψοφεω*, to break wind.) A term used by *Sauvages* and *Sagar*, to signify a flatus from the bladder, or from the womb, making its escape through the vagina.

Ægagro′pilus. (From *αιγαγρος*, a wild goat, and *pila*, a ball.) *Ægagropila.*

1. A ball found in the stomach of deer, goats, hogs, horned cattle, as cows, &c. It consists of hairs which they have swallowed from licking themselves. They are of different degrees of hardness, but have no medicinal virtues. Some rank these balls among the *Bezoars.* Hieronymus Velschius wrote a treatise on the virtues of this.

2. A species of conferva found in Wallenfenmoor, from its resembling these concretions, is also so named.

Æ′gias. A white speck on the pupil of the eye, which occasions a dimness of sight.

Ægi′des. *Aglia.* A disorder of the eyes mentioned by Hippocrates. Foësius thinks the disease consists of small cicatrices in the eye, caused by an afflux of corrosive humours upon the part. But in one passage of Hippocrates, Foësius says it signifies small white concretions of humours which stick upon the pupil, and obscure the sight.

Ægi′dion. A collyrium or ointment for inflammations and defluxions of the eyes.

Æ′gilops. Wild fescue grass. This plant is called *ægilops* from its supposed virtue in curing the disorder named Ægylops. It is a species of *Bromus* in the Linnæan system.

ÆGINE′TA, Pau′lus. A celebrated surgeon of the island of Ægina, from which he derived his name. He is placed by Le Clerc in the fourth century; by others in the seventh. He was eminently skilled in his profession, and his works are frequently cited by Fabricius ab Aquapendente. He is the first author that notices the cathartic quality of rhubarb. He begins his book with the description of the diseases of women; and is said to be the first that deserves the appellation of a man-midwife.

Ægine′tia. Malabrian broom rape. A species of *Orobanche.*

Æ′gis. *Achlys.* A film on the eye.

Ægo′ceras. (From *αιξ*, a goat, and *κερας*, a horn: so called, because the pods were supposed to resemble the horns of a goat.) Fœnugreek. See *Trigonella Fænum-græcum.*

Ægo′lethron. (From *αιξ*, a goat, and *ολεθρος*, destruction; so named from the opinion of its being poisonous to goats.) Tournefort says it is the *Chamærododendron*; now the *Azelæa pontica* of Linnæus.

Ægo′nychon. (From *αιξ*, a goat, and *ονυξ*, a hoof; because of the hardness of the seed.) Gromwell. See *Lithospermum.*

ÆGOPO′DIUM. (From *αιξ*, a goat, and *πους*, a foot; from its supposed resemblance to a goat's foot.) Goatweed. A genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* The following species was formerly much esteemed.

Ægopo′dium podagra′ria. (*Podagraria*, from its use in curing the *podagra*, or gout.) Goatweed. This plant is sedative, and was formerly applied to mitigate pains of gout, and to relieve piles, but not now employed. In its earlier state it is tender and esculent.

Ægoproso′pon. (From αιξ, a goat, and ϖροσωπον, a face; so called because goats are subject to defects in the eyes, or from having in it some ingredients named after the goat.) A name of a lotion for the eyes, when inflamed.

Æ′GYLOPS. (From αιξ, a goat, and ωψ, an eye.) A disease so named from the supposition that goats were very subject to it. The term means a sore just under the inner angle of the eye. The best modern surgeons seem to consider the ægylops only as a stage of the fistula lachrymalis. Paulus Ægineta calls it anchylops, before it bursts, and ægilops after. When the skin covering the lachrymal sac has been for some time inflamed, or subject to frequent returning inflammations, it most commonly happens that the puncta lachrymalia are affected by it; and the fluid, not having an opportunity of passing off by them, distends the inflamed skin, so that at last it becomes sloughy, and bursts externally. This is that state of the disease which is called perfect *aigylops*, or *ægylops*.

Ægy′ptia musca′ta. See *Hibiscus abelmoschus*.

Ægypti′acum. A name given to different unguents of the detergent or corrosive kind. We meet with a black, a red, a white, a simple, a compound, and a magistral Ægyptiacum. The simple Ægyptiacum, which is that usually found in our shops, is a composition of verdigrise, vinegar, and honey, boiled to a consistence. It is usually supposed to take its name from its dark colour, wherein it resembles that of the natives of Egypt. It is improperly called an unguent, as there is no oil, or rather fat, in it.

Ægy′ptium Pha′rmacum ad au′res. Aëtius speaks of this as excellent for deterging fœtid ulcers of the ears, which he says it cures, though the patient were born with them.

Aei′gluces. (From αει, always, and γλυκυς, sweet.) A sweetish wine, or must.

Aeipathei′a. (From αει, always, and ϖαθος, a disease.) Any disease of long duration.

Ænea. (From *æs*, brass, so called because it was formerly made of brass.) A catheter.

Æ′on. The spinal marrow.

Æone′sis. Fermentation. Sprinkling of the whole body.

Æo′nion. The sedum majus, or common house-leek.

Æo′ra. (From αιωϱεω, to lift up, to suspend on high.) Exercise without muscular action; as swinging. A species of exercise used by the ancients, and of which Aëtius gives the following account. Gestation, while it exercises the body, the body seems to be at rest. Of the motion there are several kinds. First, swinging in a hammock, which, at the decline of a fever, is beneficial. Secondly, being carried in a litter, in which the patient either sits, or lies along. It is useful when the gout, stone, or such other disorder, attends, as does not admit of violent motions. Thirdly, riding in a chariot, which is of service in most chronical disorders; especially before the more violent exercises can be admitted. Fourthly, sailing in a ship, or boat. This produces various effects, according to the different agitation of the waters, and, in many tedious chronical disorders, is efficacious beyond what is observed from the most skilful administration of drugs. These are instances of a passive exercise.

Æ′que. Equally. The same as *ana*.

A′ER. The fluid which surrounds the globe. See *Air* and *Atmosphere*.

Æ′pos. An excrescence, or protuberance.

Æ′ra. Darnel, or lolium.

Æri′tis. The *Anagallis*, or pimpernell.

AEROLO′GIA. (Αεϱολογια: from αηϱ, the air, and λογος, a discourse.) *Aerologice*. Aerology. That part of medicine which treats of the nature and properties of air.

Aerolo′gice. See *Aerologia*.

Aero′meli. Honey dew; also a name for manna.

Aero′phobi. (From αηϱ, air, and φοϐος. fear.) According to Cœlius Aurelianus, some phrenetic patients are afraid of a lucid, and others of an obscure air: and these he calls *aerophobi*.

Aeropho′bia. Fear of air, or wind. A symptom of the phrenitis; also a name of *Hydrophobia*.

Aero′sis. The aerial vital spirit of the antients.

Æro′sus lapis. So Pliny calls the *Lapis Calaminaris*, upon the supposition that it was a copper ore.

Æru′ca. Verdigrise.

Æru′go. (*Ærugo, ginis*, f. from *æs*, copper.)

1. The rust of any metal, particularly of copper.
2. Verdigrise. See *Verdigrise*.

Æru′go præpara′ta. See Verdigrise.

Æschromythe′sis. The obscene language of the delirious.

ÆSCULA′PIUS, worshipped by the antients as the god of medicine, was said to be the son of Apollo, by the nymph Coronis, born at Epidaurus, and educated by Chiron, who taught him to cure the most dangerous diseases, and even raise the dead. His history is so involved in fable, that it is useless to trace it minutely. His two sons Machaon and Podalirius, who ruled over a small city in Thessaly, after his death accompanied the Greeks to the siege of Troy: but Homer speaks merely of their skill in the treatment of wounds; and divine honours were not paid to their father till a later period. In the temples raised to him votive tablets were hung up, on which were recorded the diseases cured, as they imagined, by his assistance.

Æ'SCULUS. (*Æsculus*, from *esca*, food.) Horse-chesnut. The name of a genus of plants in the Linnæan system. Class, *Heptandria*. Order, *Monogynia*.

Æsculus hippocastanum. The systematic name for the hippocastanum. *Castanea equina, pavina.* Common horse-chesnut. *Æsculus hippocastanum; foliolis septenis* of Linnæus. The fruit, when dried and powdered, is recommended as an errhine. The bark is highly esteemed on the Continent as a febrifuge; and is, by some, considered as being superior in quality to the Peruvian bark. The bark intended for medical use is to be taken from those branches which are neither very young nor very old, and to be exhibited under similar forms and doses as directed with respect to the cortex peruvianus. It rarely disagrees with the stomach; but its astringent effects generally require the occasional administration of a laxative.

During the late scarcity of grain, some attempts were made to obtain starch from the horse-chesnut, and not without success.

Æseca'vum. Aurichalcum, or brass.

Æsta'tes. Freckles in the face; sunburnings.

Æstphara. Incineration, or burning of the flesh, or any other part of the body.

Æstua'rium. A stove for conveying heat to all parts of the body at once. A kind of vapour bath. *Ambrose Parey* calls an instrument thus, which he describes for conveying heat to any particular part. *Palmarius, de morbis contagiosis*, gives a contrivance under this name, for sweating the whole body.

Æstua'tio. The boiling up, or rather the fermenting of liquors when mixed.

Æ'stus vola'ticus. (From *æstus*, heat, and *volo*, to fly.) According to Vogel, synonymous with phlogosis. Sudden heat, or scorching, which soon goes off, but which for a time reddens the face.

Æ'THER. (*Æther, eris*, m. from Αιθηϱ, a supposed fine subtile fluid.) *Liquor æthereus.* Ether. *Æther sulphuricus, nitricus muriaticus*, according to the acid from which it is formed in conjunction with alcohol. A volatile liquor, obtained by distillation, from a mixture of alcohol and a concentrated acid.

The medical properties of æther, when taken internally, are antispasmodic, cordial, and stimulant. Against nervous and typhoid fevers, all nervous diseases, but especially tetanic affections, soporose diseases from debility, asthma, palsy, spasmodic colic, hysteria, &c. it always enjoys some share of reputation. Regular practitioners seldom give so much as empirics, who sometimes venture upon large quantities, with incredible benefit. Applied externally, it is of service in the headache, toothache, and other painful affections. Thus employed, it is capable of producing two very opposite effects, according to its management; for, if it be prevented from evaporating, by covering the place to which it is applied closely with the hand, it proves a powerful stimulant and rubefacient, and excites a sensation of burning heat, as is the case with solutions of camphor in alcohol, or turpentine. In this way it is frequently used for removing pains in the head or teeth. On the contrary, if it be dropped on any part of the body, exposed freely to the air, its rapid evaporation produces an intense degree of cold; and as this is attended with a proportional diminution of bulk in the part applied in this way it has frequently contributed to the reduction of the intestine, in cases of strangulated hernia.

Æthe'rea he'rba. The Eryngium was so called.

Æthereal oil. An animal or vegetable oil, highly rectified, partaking, as it were, of the nature of æther. See *Oleum Æthereum.*

Æ'THER SULPHU'RICUS. *Naptha vitrioli. Æther Vitriolicus.* Sulphuric ether.

"Take of rectified spirit,
Sulphuric acid, of each, by weight, a pound and a half.

Pour the spirit into a glass retort, then gradually add to it the acid, shaking it after each addition, and taking care that their temperature, during the mixture, may not exceed 120 degrees. Immerse the retort very cautiously into a sand bath, previously heated to 200 degrees, so that the liquor may boil as speedily as possible, and let the æther pass over into a tubulated receiver, to the tubulure of which another receiver is applied, and kept cold by immersion in ice, or water. Distil the liquor until a heavier part also begins to pass over, and appear under the æther in the bottom of the receiver. To the liquor which remains in the retort, pour on twelve fluid ounces more of rectified spirit, and repeat the distillation in the same manner."

It is mostly employed as an excitant, nervine, antispasmodic, and diuretic, in cases of spasms, cardialgia, enteralgia, fevers, hysteria, cephalalgia, and spasmodic asthma. The dose is from min. xx to ʒij. Externally it cures toothache, and violent pains in the head. See *Æther.*

Æ'THER RECTIFICA'TUS. *Æther vitriolicus.* Rectified æther.

"Take of sulphuric æther, fourteen fluid ounces.
Fused potash, half an ounce.
Distilled water, two fluid ounces.

Dissolve the potash in the water, and add thereto the æther, shaking them well together, until they are mixed. Lastly, by means of a temperature of about 200 degrees, distil over twelve fluid ounces of rectified æther, from a large retort into a cooled receiver."

Sulphuric æther is impregnated with some sulphurous acid, as is evident in the smell, and with some ætherial oil: and these require a second process to separate them. Potash unites to the acid, and requires to be added in a state of solution, and in sufficient quantities, for the purpose of neutralizing it; and it also forms a soap with the oil. It is advantageous also to use a less quantity of water than exists in the ordinary solution of potash: and therefore the above directions are adopted in the last London Pharmacopœia. For its virtues, see *Æther.*

Æ´THIOPS. A term applied formerly to several preparations, because of a black colour, like the skin of an Æthiopian.

Æ´THIOPS ANTIMONIA´LIS. A preparation of antimony and mercury, once in high repute, and still employed by some practitioners in cutaneous diseases. A few grains are to be given at first, and the quantity increased as the stomach can bear it.

Æ´THIOPS MARTIA´LIS. A preparation of iron, formerly in repute, but now neglected.

Æ´THIOPS MI´NERAL. The substance heretofore known by this name, is called, by the London College, Hydrargyri sulphuretum nigrum, which see.

Æthmoid Artery. See *Ethmoid Artery.*

Æthmoid Bone. See *Ethmoid Bone.*

Æ´THNA. A chemical furnace.

Æ´THOCES. *Ætholices.* Superficial pustules in the skin, raised by heat, as boils, fiery pustules.

ÆTHU´SA. (From αιθουσα, beggarly.) The name of a genus of plants of the Linnæan system. Class, *Pentandria.* Order, *Digynia,* of which the following species is sometimes used medicinally.

ÆTHUSA MEUM. The systematic name of the *meum* of the Pharmacopœias. Called also *Meu, Spignel,* Baldmoney. The root of this plant is recommended as a carminative, stomachic, and for attenuating viscid humours, and appears to be nearly of the same nature as lovage, differing in its smell, being rather more agreeable, somewhat like that of parsnips, but stronger, and being in its taste less sweet, and more warm, or acrid.

ÆTHYA. A mortar.

Æ´TIOI PHLE´BES. Eagle veins. The veins which pass through the temples to the head, were so called formerly by Rufus Ephesius.

ÆTIOLOGY. (Αιτιολογια: from αιτια, a cause, and λογος, a discourse.) The doctrine of the causes of diseases.

AË´TIUS, called *Amidenus,* from the place of his birth, flourished at Alexandria, about the end of the fifth century. He left sixteen books, divided into four *tetrabiblia,* on the practice of physic and surgery, principally collected from Galen and other earlier writers, but with some original observations. He appears very partial to the use of the cautery, both actual and potential, especially in palsy: which plan of treatment Mr. Pott revived in paraphlegia; and it has since often been adopted with success. Aëtius is the earliest writer, who ascribed medical efficacy to the external use of the magnet, particularly in gout and convulsions; but rather on the report of others, than as what he had personally experienced.

ÆTO´CION. *Ætolium.* The granum cnidium.

ÆTO´NYCHUM. See *Lithospermum.*

AFFECTION. (This is expressed in Greek by ϖαθος: hence *pathema, passio.*) This term indicates any existing disorder of the whole body, or a part of it, as hysterics, colic, leprosy. Thus by adding a descriptive epithet to the term affection, most distempers may be expressed. We say febrile affection, cutaneous affection, &c. using the word affection synonymously with disease.

AFFINITY. (*Affinitas,* a proximity of relationship.) The term affinity is used indifferently with attraction. See *Attraction.*

Affinity of Aggregation. See *Attraction.*

Affinity of Composition. See *Attraction.*

Affinity, Compound. When three or more bodies, on account of their mutual affinity, unite and form one homogeneous body, then the affinity is termed compound affinity or attraction: thus, if to a solution of sugar and water be added spirits of wine, these three bodies will form an homogeneous liquid by compound affinity. See *Attraction.*

Affinity Divellent. See *Affinity Quiescent.*

Affinity, Double. Double elective attraction. When two bodies, each consisting of two elementary parts, come into contact, and are decomposed, so that their elements become reciprocally united, and produce two new compound bodies, the decomposition is then termed, decomposition by double affinity: thus, if we add common salt, which consists of muriatic acid and soda, to nitrate of silver, which is composed of nitric acid and oxyde of silver, these two bodies will be decompounded; for the nitric acid unites with the soda, and the oxide of silver with the muriatic acid, and thus may be obtained two new bodies. The common salt and nitrate of silver therefore mutually decompose each other by what is called double affinity. See *Attraction.*

Affinity, Intermediate. Appropriate affinity. Affinity of an intermedium is, when two substances of different kinds, that show to one another no component affinity, do, by the assistance of a third, combine, and unite into an homogeneous whole: thus, oil and water are substances of different kinds, which, by means of alkali, combine and unite into an homogeneous substance: hence the theory of lixiviums, of washing, &c. See *Attraction.*

Affinity, Quiescent. Mr. Kirwan employs the term *Quiescent affinity* to mark that, by virtue of which, the principles of each compound, decomposed by double affinity, adhere to each other; and *Divellent affinity*, to distinguish that by which the principles of one body unite and change order with those of the other; thus sulphate of potash or vitriolated tartar is not completely decomposed by the nitric acid or by lime, when either of these principles is separately presented; but if the nitric acid be combined with lime, this nitrate of lime will decompose the sulphate of potash. In this last case the affinity of the sulphuric acid with the alkali is weakened by its affinity to the lime. This acid, therefore, is subject to two affinities, the one which retains it to the alkali, called quiescent, and the other which attracts it towards the lime, called divellent affinity.

Affinity, reciprocal. When a compound of two bodies is decomposed by a third; the separated principle being in its turn capable of decomposing the new combination: thus ammonia and magnesia will separate each other from muriatic acid.

Affinity, simple. Single elective attraction. If a body consisting of two component parts, be decomposed on the approach of a third, which has a greater affinity with one of those component parts than they have for each other, then the decomposition is termed, decomposition by simple affinity; for instance, if pure potash be added to a combination of nitric acid and lime, the union which existed between these two bodies will cease, because the potash combines with the nitric acid, and the lime being disengaged, is precipitated. The reason is, that the nitric acid has a greater affinity for the pure potash than for the lime, therefore it deserts the lime, to combine with the potash. When two bodies only enter into chemical union, the affinity, which was the cause of it, is also termed simple or single elective attraction; thus the solution of sugar in water is produced by simple affinity, because there are but two bodies. See *Attraction.*

A′ffion. *Affium.* An Arabic name for opium.

A′ffium. See *Affion.*

Affla′tus. (From *ad* and *flare*, to blow.) A vapour or blast. A species of erysipelas, which attacks people suddenly, so named upon the erroneous supposition that it was produced by some unwholesome wind blowing on the part.

Affu′sio. Pouring a liquor upon something; but sometimes it means the same as *suffusio*, a cataract.

After-birth. See *Placenta.*

A′ga Crete′nsium. The small Spanish milk-thistle.

Agalacta′tio. See *Agalactia.*

Agala′ctia. (Αγαλακτια: from α, priv. and γαλα, milk.) *Agalaxis. Agalactio. Agalactatio.* A defect of milk in childbirth.

Agala′ctos. (From α, priv. and γαλα, milk.) An epithet given to women who have no milk when they lie in.

Agala′xis. See *Agalactia.*

Aga′llochi ve′ri li′gnum. See *Lignum Aloes.*

Aga′lluge. *Agallugum.* A name of the agallochum or aromatic aloe.

Agaric. See *Agaricus.*

Agaricoi′des. A species of agaricus or fungus.

AGA′RICUS. (Αγαρικος: from *Agaria*, a town in Asia; or from *Agarus*, a river in Sarmatia, now Malowouda.) Agaric. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Fungi.* Several species of this genus have been, and still are, used for medicinal and culinary purposes.

Aga′ricus a′lbus. See *Boletus Laricis.*

Aga′ricus campe′stris. There are several species of the *agaricus*, which go by the term mushroom; as the *agaricus chantarellus, deliciosus, violaceus,* &c. but that which is eaten in this country is the *agaricus campestris* of Linnæus. Similar to it in quality is the champignion or *agaricus pratensis.* Broiled with salt and pepper, or stewed with cream and some aromatic, they are extremely delicious, and, if not eaten to excess, salubrious. Great care should be taken to ascertain that they are the true fungus, and not those of a poisonous nature. *Catchup* is made by throwing salt on mushrooms, which causes them to part with their juice.

Aga′ricus chantare′llus. A species of fungus, esteemed a delicacy by the French. Broiled with salt and pepper, it has much the flavour of a roasted cockle.

Aga′ricus chirurgo′rum. See *Boletus Igniarius.*

Aga′ricus cinnamo′meus. Brown Mushroom. A species of agaricus, of a pleasant smell. When broiled, it gives a good flavour.

Aga′ricus delicio′sus. This fungus well seasoned and then broiled has the exact flavour of a roasted muscle. It is in season in September.

Aga′ricus musca′rius. Bug Agaric, so called from its known virtue in destroying bugs. This reddish fungus is the *Agaricus muscarius* of Linnæus: — *stipitatus, lamellis dimidiatis solitariis, stipite volvato, apice dilatato, basi ovato.* The use of this vegetable is not much known in this country. Haller relates that six persons of Lithuania perished at one time, by eating this kind of mushroom, and that in others it has caused delirium. It is employed externally to strumous, phagedenic, and fistulous ulcers, as an escharotic.

Aga′ricus pipera′tus. The plant thus named by Linnæus, is the pepper mushroom, also called pepper agaric. It is the fungus piperatus albus, lacteo-succo turgens of Ray. Fungus albus acris. When freely taken, fatal consequences are related by several writers to have been the result. When this vegetable has even lost its acrid juice by drying, its caustic quality still remains.

Aga′ricus prate′nsis. The Champignion of Hudson's Flora Anglica. This plant has but little smell, and is rather dry, yet when broiled and stewed, communicates a good flavour.

Aga′ricus viola′ceus. Violet mushroom. This fungus requires much broiling, but when sufficiently done and seasoned, it is as delicious as an oyster. Hudson's bulbosus is only a variety of this.

AGE. The antients reckoned six stages of life: *pueritia*, childhood, which is to the fifth year of our *age*; — *adolescentia*, youth, reckoned to the eighteenth, and youth properly so called, to the twenty-fifth year; — *juventus*, reckoned from the twenty-fifth to the thirty-fifth year; — *virilis ætas*, manhood, from the thirty-fifth to the fiftieth year; — *senectus*, old *age*, from fifty to sixty; — *crepita ætas*, decrepid age, which ends in death.

Agenne′sia. (Αγεννησια: from α, neg. γενναω, to beget.) Impotency in man. A term employed by Vogel. It is synonymous with *anaphrodisia* and *dyspermatismus*.

A′ger. The common earth or soil.

A′ger natu′ræ. The womb.

Agera′tus la′pis (*Ageratus* common.) A stone used by coblers. It is ridiculously said to be discutient and gently astringent. If it possess any such virtues, it probably contains iron; a supposition countenanced by its being used in dyeing.

Age′ratum. (Αγηρατον: from α, priv. and γηρας, *senectus*; never old, ever green; because its flowers preserve their beauty a long time.) See *Achillæa ageratum*.

A′ges. (From αγης, wicked; so called because it is generally the instrument of wicked acts.) The palm or hollow of the hand.

AGEU′STIA. (From α, neg. and γευομαι, *gusto*, to taste.) *Agheustia*, *Apogeustia*, *Apogeusis*. A defect or loss of taste. A genus of disease in the class *locales*, and order *dysæsthesiæ* of Cullen. The causes are fever or palsy, whence he forms two species; the latter he calls *organic*, arising from some affection in the membrane of the tongue, by which relishing things, or those which have some taste, are prevented from coming into contact with the nerves; the other *atonic*, arising without any affection of the tongue.

Agglutina′ntia. Adhesive medicines which heal by causing the parts to stick together.

Agglutina′tio. Agglutination. The adhesive union or sticking together of substances.

Aggluti′tio. Obstruction in the œsophagus, or a difficulty in swallowing.

Aggregate glands. (From *aggrego*, to assemble together.) An assemblage of glands, as those of the intestines.

Aggregation, affinity of. See *Attraction*.

Agheu′stia. See *Ageustia*.

A′gis. The thigh or femur.

Agitato′ria. Convulsive diseases, or those called clonic.

Aglacta′tio. Defect of milk.

Agla′xis. The same.

Aglia. *Aglium*. A shining tubercle r pustule on the face. White specks on the eye. See *Ægides*.

A′gma. *Agme*. A fracture.

A′gnacal. A tree, which, according to Ray, grows about the isthmus of Darien, and resembles a pear-tree, whose fruit is a great provocative to venery.

Agna′ta. See *Adnata tunica*.

Agni′na membra′na. (From *agnus*, a lamb, and *membrana*, a membrane.) Aëtius calls one of the membranes which involve the fœtus by this name, which he derives from its tenderness. See *Amnios*.

Agnoi′a. (From α, priv. and γινωσκω, to know.) Forgetfulness; a symptomatic affection in fevers.

A′gnus ca′stus. (From *agnus*, a lamb; so called from the down upon its surface, which resembles that upon a lamb's skin; and *castus*, because the chaste matrons, at the feasts of Ceres, strewed them upon their beds, and lay upon them.) The *Chaste Tree*. See *Vitex*.

Ago′ge. The deduction or reasoning upon diseases from their symptoms and appearances. The order, state, or tenour of a disease or body.

Agomphi′asis. A looseness of the teeth.

A′gone. (Αγονη: from α, neg. and γονος, offspring.) Hyoscyamus or Henbane; so called because it was supposed to cause barrenness.

Ago′nia. Sterility, impotence, agony.

Agoni′sticum. (Αγωνιϛικον, from αγωνιαω, to struggle.) A term used by antient physicians to signify water extremely cold, which was directed to be given in large quantities, in acute erysipelatous fevers, with a view of overpowering or struggling with the febrile heat of the blood.

A′gonos. (From α, priv. and γονος, or γονη, an offspring; barren.) Hippocrates calls those women so who have not children, though they might have if the impediment were removed.

Ago′stos. (From αγω, to bring, or lead.) That part of the arm from the elbow to the fingers; also the palm or hollow of the hand.

Agre′sta. (Αγριος, wild.) Verjuice, which is made from the wild apple. The immature fruit of the vine.

Agre′sten. A name for the common tartar.

Agre′stis. In the works of some old writers it expresses an ungovernable malignity in a disease.

A′gria. 1. A name of the Ilex aquifolium or Holly.

2. A malignant pustule, of which, the antient surgeons describe two sorts; one which has been so called, is small, and casts a roughness or redness over the skin, slightly corroding it, smooth about its center, spreads slowly, and is of a round figure; this sort is cured by rubbing it with the fasting spittle. The second ulcerates, with a violent redness and

corrosion, so as to make the hair fall off; it is of an unequal form, and turns leprous; it is cured, by the application of pellitory of the wall in the manner of a poultice.

Agria′mpelos. (From αγριος, wild, and αμπελος, a vine.) The wild vine, or white bryony. See *Bryonia.*

Agrielæ′a. (From αγριος, wild, and ελαια, the olive-tree.) The oleaster, or wild olive.

Agrifo′lium. (From ακις, a prickle, and φυλλόν, a leaf.) Aquifolium, or holly tree. It should rather be called acifolium from its prickly leaves.

AGRIMO′NIA. (From αγρος, a field, and μονος, alone: so named from its being the chief of all wild herbs.) Agrimony.

1. The name of a genus of plants in the Linnæan system.

2. The pharmacopœial name of a plant; the common agrimony. *Agrimonia Eupatoria* of Linnæus: —*foliis caulinis pinnatis, foliolis undique serratis, omnibus minutis interstinctis, fructibus hispidis.* It is common in fields about hedges and shady places, flowering in June and July. It has been principally regarded in the character of a mild astringent and corroborant, and many authors recommend it as a deobstruent, especially in hepatic and other visceral obstructions. Chomel relates two instances of its successful use in cases where the liver was much enlarged and indurated. It has been used with advantage in hæmorrhagic affections, and to give tone to a lax and weak state of the solids. In cutaneous disorders, particularly in scabies, we have been told that it manifests great efficacy; for this purpose it was given infused with liquorice in the form of tea; but according to Alston it should be always exhibited in the state of powder. It is best used while fresh, and the tops, before the flowers are formed, possess the most virtue. Cullen observes that the agrimony has some astringent powers, but they are feeble; and pays little attention to what has been said in its favour.

Agrimonia Eupatoria. See *Agrimonia.*

Agrimony. See Agrimonia.

Agrimony, hemp. The Bidens tripartita of Linnæus.

Agrioca′rdamum. (From αγριος, wild, and καρδαμον, the nasturtium.) Sciatica cresses, or wild garden cress.

Agrioca′stanum. (From αγριος, wild, and καςανον, the chesnut.) Earth-nut or pig-nut.

Agrioci′nara. (From αγριος, wild, and κινκρα, artichoke.) See *Cinara.*

Agriococcime′la. (From αγριος, wild, κοκκος, a berry, and μηλεα, an apple-tree.) The prunus sylvestris.

Agriome′la. The crab apple.

A′grion. *Agriophyllon.* The peucedanum silaus, or hog's fennel, or sulphur wort.

Agriophy′llon. See *Agrion.*

Agriopastina′ca. (From αγριος, wild, and *pastinaca*, a carrot.) Wild carrot, or parsnip.

Agriori′ganum. (From αγριος, wild, and οριγανον, marjoram.) Wild marjoram. See *Origanum.*

Agrioseli′num. (From αγριος, wild, and σελινον, parsley.) Wild parsley. See *Smyrnium.*

Agriosta′ri. (From αγριος, wild, and ςαις, wheat). A species of field-corn, called Triticum creticum.

Agripa′lma. (From αγριος, wild, and ϖαλμα, a palm-tree.) *Agripalma gallis.* The herb mother-wort, or wild palm.

Agripa′lma ga′llis. See *Agripalma.*

Agri′ppæ. Those children which are born with their feet foremost, are so called, because that was said to be the case with Agrippa the Roman, who was named *ab ægro partu*, from his difficult birth. These births, though reckoned preter-natural, are often more safe and easy than the natural.

A′grium. An impure sort of natron, or soda. The purer sort was called halmyrhaga.

A′grom. A disease of the tongue peculiar to the Indians, in which it becomes extremely rough and chopped.

Agru′mina. Leeks, wild onions.

Agry′pnia. (From α, priv. and υπνος, sleep.) Watchfulness: want of sleep.

Agrypnoco′ma. (From αγρυπνος, without sleep, and κωμα, a lethargy.) A lethargic kind of watchfulness, in which the patient is stupidly drowsy, and yet cannot sleep. A species of coma.

Ague. See *Febris Intermittens.*

Ague cake. The popular name for a hard tumour on the left side of the belly, lower than the false ribs in the region of the spleen, said to be the effect of intermittent fevers. However frequent it might have been formerly, it is now very rare, and although then said to be owing to the use of bark, it is now less frequent since the bark has been generally employed.

Ague drops. This is a medicine sold for the cure of agues, composed of arsenite of potash in solution in water.

Ague-free. A name given by some to sassafras on account of its supposed febrifuge virtue.

Ague tree. See *Laurus.*

Agui′a. (From α, priv. and γυιον, a member.) Paralytic debility. Where the use of the members is defective or lost.

A′gul. (Arab.) *Alhagi.* The Syrian thorn. The leaves are purgative.

AGUSTINE. A new earth discovered in the Saxon Beryl, or Beryl of Georgien Stadt, a stone greatly resembling the Beryl of Siberia, by professor Tromsdorff of Erfurth in Germany, to which he has given the name of agustine on account of the property of forming salts which are nearly destitute of taste.

This earth is white and insipid; when moistened with water, it is somewhat ductile, but is not soluble in that fluid. Exposed to a violent heat, it becomes extremely hard, but acquires no taste. It combines with acids, forming salts, which have little or no taste. It does not combine either in the humid or dry way with alkalies, or with their carbonates. It retains carbonic acid but feebly. It dissolves in acids equally well after having been hardened, by exposure to heat, as when newly precipitated. With sulphuric acid it forms a salt which is insipid, and scarcely soluble, but an excess of acid renders it soluble, and capable of crystallizing in stars. With an excess of phosphoric acid it forms a very soluble salt. With nitrous acid it forms a salt scarcely soluble.

Agutiguepoo′bi Brazilie′nsis. (An Indian term.) Arrow-root: dartwort. Esculent and vulnerary, and used by the Indians to cure wounds made by arrows.

Agyion. See *Aguia*.

Agy′rtæ. (From *αγυϱις*, a crowd of people, or a mob; or from *αγειϱω*, to gather together.) It formerly expressed certain strollers who pretended to strange things from supernatural assistances; but of late it is applied to all quack and illiterate dabblers in medicine.

Ahaloth. The Hebrew name of lignum aloes.

Ahame′lla. See *Achmella*.

Aho′vai theveticlush. A chesnut-like fruit of Brazil of a poisonous nature.

Ahu′sal. Orpiment.

Ai′lmad. An Arabian name for antimony.

Aimatei′a. A black bilious and bloody discharge from the bowels.

Aimo′rrhois. See *Hæmorrhois*.

Aimorrhœ′a. See *Hæmorrhagia*.

Aipathei′a. (From *αει* always, and *ϖαθος*, a disease.) A disease of long continuance.

Ai′pi. *Aipima coxera*. *Aipipoca*. Indian words for Cassada. A poisonous root of India.

AIR. Common air. Atmospherical air. The word air seems to have been used at first to denote the atmosphere in general; but philosophers afterwards restricted it to the elastic fluid, which constitutes the greatest and the most important part of the atmosphere, excluding the water and the other foreign bodies which are occasionally found mixed with it. See *Atmosphere*.

Air is an elastic fluid, invisible indeed, but easily recognised by its properties. Its specific gravity, according to the experiments of Sir George Shuckburgh, when the barometer is at 30 inches, and the thermometer between 50 and 60 deg. is 0.0012, or 816 times lighter than water. One hundred cubic inches of air weigh 31 grains troy. But as air is an elastic fluid, and compressed at the surface of the earth by the whole weight of the incumbent atmosphere, its density diminishes according to its height above the surface of the earth. From the experiments of Paschal, Deluc, General Roy, &c., it has been ascertained that the density diminishes in the ratio of the compression. Consequently the density decreases in a geometrical progression, while the heights increase in an arithmetical progression. Bouguer had suspected, from his observations made on the Andes, that at considerable heights the density of the air is no longer proportional to the compressing force; but the experiments of Saussure junior, made upon Mount Rose, have demonstrated the contrary.

Air is dilated by heat. From the experiments of General Roy and Sir George Shuckburgh, compared with those of Trembley, &c., it appears, that at the temperature of 60 deg. every degree of temperature increases the bulk of air about 1-82d part. But the experiments of Mr. Dalton of Manchester, and those of Gay-Lussac, where attention was paid to have the air previously well dried, show that the expansion by one degree of heat is only about 1-480 of the whole volume.

The specific caloric of air, according to the experiments of Dr. Crawford, is 1-79, that of water being reckoned 1.

Although the sky is well known to have a blue colour, yet it cannot be doubted that air itself is altogether colourless and invisible. The blue colour of the sky is occasioned by the vapours which are always mixed with the air, and which have the property of reflecting the blue rays more copiously than any other. This has been proved by the experiments which Saussure made with his *cyanometer* at different heights above the surface of the earth. This consisted of a circular band of paper, divided into 51 parts, each of which were painted with a different shade of blue; beginning with the deepest mixed with black, to the lightest mixed with white. He found that the colour of the sky always corresponds with a deeper shade of blue, the higher the observer is placed above the surface; consequently, at a certain height, the blue will disappear altogether, and the sky appear black; that is to say, will reflect no light at all. The colour becomes aways lighter in proportion to the vapours mixed with the air. Hence it is evidently owing to them.

The property which the air has of supporting combustion, and the necessity of it for respiration, are too well known to require any description.

For many ages, air was considered as an element, or simple substance. For the knowledge of its component parts, we are indebted to the labours of those philosophers in whose hands chemistry advanced with such rapidity during the last forty years of the eighteenth century.

Air is a compound of oxygen and nitrogen: but it becomes a question of considerable consequence to determine the proportion of these two ingredients, and to ascertain whether that proportion is in every case the same. Since nitrogen gas, one of the component parts of that fluid, cannot be separated by any substance with which chemists are acquainted, the analysis of air can only be attempted by exposing it to the action of those bodies which have the property of absorbing its oxygen. By these bodies the oxygen gas is separated, and nitrogen gas is left behind, and the proportion of oxygen may be ascertained by the diminution of bulk; which, once known, it is easy to ascertain the proportion of nitrogen gas, and thus to determine the exact relative quantity of the component parts.

After the composition of the atmosphere was known to philosophers, it was taken for granted that the proportion of its oxygen varies in different times and in different places; and that upon this variation the purity or noxious qualities of air depended. Hence it became an object of the greatest importance to be in possession of a method of determining readily the quantity of oxygen in a given portion of air. Accordingly various methods were proposed, all of them depending upon the property which a variety of bodies possesses of absorbing the oxygen of the air, without acting upon its azot. These bodies were mixed with a certain known quantity of atmospheric air, in graduated glass vessels inverted over water, and the proportion of oxygen was determined by the diminution of bulk. These instruments received the name of *eudiometers*, because they were considered as measures of the purity of air. See *Eudiometer*.

It is considered as established by experiment, that air is composed of 0.21 of oxygen gas, and 0.79 of nitrogen gas by bulk. But as the weight of these two gases is not exactly the same, the proportion of the component parts by weight will differ a little: for as the specific gravity of oxygen gas is to that of nitrogen gas as 135 : 118, it follows that 100 parts of air are composed by weight of

about 76 nitrogen gas
24 oxygen gas
——
100

Having thus ascertained the nature and the proportion of the component parts of air, it remains only to enquire in what manner these component parts are united. Are they merely mixed together mechanically, or are they combined chemically? Is air a mechanical mixture or a chemical compound? Philosophers seem at first to have adopted the former of these opinions, if we except Scheele, who always considered air as a chemical compound. But the supposition that air is a mechanical mixture, by no means agrees with the phenomena which it exhibits. If the two gases were only mixed together, as their specific gravity is different, it is scarcely possible that they would be uniformly mixed in every part of the atmosphere. Even Mr. Dalton's ingenious supposition, that they neither attract nor repel each other, would not account for this equal distribution: for undoubtedly, on that supposition, they would arrange themselves according to their specific gravity. Since, therefore, air is in all places composed of the same ingredients, exactly in the same proportions, it follows that its component parts are not only mixed, but actually combined. When substances differing in specific gravity combine together, the specific gravity of the compound is usually greater than the mean. This holds also with respect to air. The specific gravity, by calculation, amounts only to 0.00119, whereas it actually is 0.0012. But perhaps the specific gravity of nitrogen and oxygen gas can scarcely be considered as known with such precision as to entitle us to draw any consequence from this difference.

The difference between air and a mere mixture of its two component parts, has been demonstrated by the experiments of Morozzo and Humboldt. The artificial mixture is much more diminished by nitrous gas than air, even when the mixture contains less oxygen. It supports flame better and longer, and animals live in it longer than they do in an equal portion of air.

The air is, therefore, to be considered as a chemical compound. Hence the reason that it is in all cases the same, notwithstanding the numerous decomposing processes to which it is subjected. The breathing of animals, combustion, and a thousand other operations, are constantly abstracting its oxygen, and decomposing it. The air thus decomposed or vitiated no doubt ascends in the atmosphere, and is again, by some unknown process or other, reconverted into atmospherical air. But the nature of these changes is at present concealed under an impenetrable veil. *Thomson.*

Air, alkaline. See *Ammonia.*

Air, atmospherical. See *Air.*

Air, azotic. See *Nitrogen gas.*

Air, fixed. See *Carbonic acid gas.*

Air, fluoric. See *Fluoric acid gas.*

Air, hepatic. See *Hydrogen gas, sulphuretted.*

Air, inflammable. See *Hydrogen gas.*

Air, marine. See *Muriatic acid gas.*

Air, nitrous. See *Nitrous gas.*

Air, phlogisticated. See *Nitrogen gas.*

Air, phosphoric. See *Hydrogen gas, phosphuretted.*

Air, sulphureous. See *Sulphurous acid gas.*

Air, vital. See *Oxygen gas.*

AISTHETE′RIUM. (From *αισθανομαι*, to perceive.) The sensorium commune, or common sensory, or seat, or origin of sensation. Cartesius and others say, it is the pineal gland; Willis says, it is where the nerves of the external senses are terminated, which is about the beginning of the medulla oblongata, (or top of the spinal marrow,) in the corpus striatum.

AI′TMAD. Antimony.

AIX LA CHAPE′LLE. Called Aken by the Germans. Thermæ Aquis-granensis. A town in the south of France, where there is a sulphureous water, the most striking feature of which, and what is almost peculiar to it, is the unusual quantity of sulphur it contains; the whole, however, is so far united to a gaseous basis, as to be entirely volatilized by heat; so that none is left in the residuum after evaporation. In colour it is pellucid, in smell sulphureous, and in taste saline, bitterish, and rather alkaline. The temperature of these waters varies considerably, according to the distance from the source and the spring itself. In the well of the hottest bath, it is, according to Lucas, 136°, Monet, 146°; at the fountain where it is drank, it is 112°. This thermal water is much resorted to on the Continent, for a variety of complaints. It is found essentially serviceable in the numerous symptoms of disorders in the stomach and biliary organs, that follow a life of high indulgence in the luxuries of the table; in nephritic cases, which produce pain in the loins, and thick mucous urine with difficult micturition. As the heating qualities of this water are as decided as in any of the mineral springs, it should be avoided in cases of a general inflammatory tendency, in hectic fever and ulceration of the lungs; and in a disposition to active hæmorrhagy. As a hot bath, this water is even more valuable and more extensively employed than as an internal remedy. The baths of Aix la Chapelle may be said to be more particularly medicated than any other that we are acquainted with. They possess both temperature of any degree that can be borne, and a strong impregnation with sulphur in its most active forms, and a quantity of alkali which is sufficient to give it a very soft soapy feel, and to render it more detergent than common water. From these circumstances these baths will be found of particular service in stiffness and rigidity of the joints and ligaments, which is left by the inflammation of gout and rheumatism, and in the debility of palsy, where the highest degree of heat which the skin can bear is required. The sulphureous ingredient renders it highly active in almost every cutaneous eruption, and in general in every foulness of the skin; and here the internal use of the water should attend that of the bath. These waters are also much employed in the distressing debility which follows a long course of mercury and excessive salivation. Aken water is one of the few natural springs, that are hot enough to be employed as a vapour bath, without the addition of artificial heat. It is employed in cases in which the hot bath is used; and is found to be a remarkably powerful auxiliary in curing some of the worst species of cutaneous disorders. With regard to the dose of this water to be begun with, or the degree of heat to bathe in, it is in all cases best to begin with small quantities and low degrees of heat, and gradually increase them, agreeably to the effects and constitution of the patient. The usual time of the year for drinking these waters, is from the beginning of May to the middle of June, or from the middle of August to the latter end of September.

Aizo′on. (From αει always, and ζω to live.) *Aizoum.* An evergreen aquatic plant, like the aloe, said to possess antiscorbutic virtues.

Aja′va. (Indian.) A seed used in the East Indies as a remedy for the colic.

AJUGA. (From α, priv. and ζυγον, a yoke.)

1. The name of a genus of plants in the Linnæan system.

2. The pharmacopœial name of the creeping bugloss. Called also *Consolida media. Bugula.* Upright bugloss. Middle consound. This plant, *Ajuga pyramidalis* of Linnæus: — *tetragono pyramidalis, villosa foliis radicalibus maximis,* possesses subadstringent and bitter qualities: and has been recommended in *phthisis, aphthæ,* and *cynanche.*

Ajuga pyramidalis. See *Ajuga.*

Ajura′rat. Lead.

A′KENSIDE, Mark, an English physician, born at Newcastle-upon-Tyne, in 1721; but more distinguished as a poet, especially for his "Pleasures of the Imagination." After studying at Edinburgh, and graduating at Leyden, he settled in practice; but though appointed physician to the Queen, as well as to St. Thomas's Hospital, he is said not to have been very successful. He died of a putrid fever, in his 49th year. He has left a Dissertation on Dysentery in Latin, admired for its elegance; and several small Tracts in the Philosophical, and London Medical Transactions.

Al. The Arabian article which signifies *the;* it is applied to a word by way of eminence, as the Greek ο is. The Easterns express the superlative by adding *God* thereto, as *the mountain of God,* for the highest mountain; and it is probable that *Al* relates to the word *Alla,* God: so *alchemy,* may be *the chemistry of God,* or the most exalted perfection of chemical science.

A′la. A wing. The arm-pit, so called because it answers to the pit under the wing of a bird.

Ala′bari. Lead.

A′lacab. Sal ammoniac.

Alæfo′rmis. Any thing like a wing.

A′læ au′ris. The upper part of the external ear.

A′læ nasi. Two cartilages of the nose which form the outer part of the nostrils.

A′læ vespertilio′num. That part of the ligaments of the womb, which lies between the tubes and the ovaria; so called from its resemblance to the wing of a bat.

A′læ inte′rnæ mino′res. See *Nymphæ.*

A′lafi. *Alafor. Alafort.* Alkaline.

Alai′a phthi′sis. (From αλαιος, blind, and φθισις, a wasting.) A consumption from a flux of humours from the head.

A'lamad. *Alamed.* Antimony.

Ala'mbic. Mercury.

Alandahla. (Arab. bitter.) The bitter apple, or colocynth.

Alanfu'ta. (Arab.) A vein between the chin and lower lip, which was formerly opened to prevent fœtid breath.

Alapou'li. See *Bilimbi.*

Ala're exte'rnum. A name of the external pterygoid muscle; so called because it takes its rise from the wing-like process of the sphenoid bone.

Ala'ria o'ssa. The wing-like processes of the sphenoid bone.

Ala'ris ve'na. The innermost of the three veins in the bend of the arm.

Alasalet. *Alaset.* Ammoniacum.

Alasi. *Alafor.* An alkaline salt.

Ala'strob. Lead.

A'latan. Litharge.

Alate'rnus. A species of rhamnus.

Ala'ti. Those who have prominent scapulæ like the wings of birds.

Alau'rat. Nitre.

Albadal. An Arabic name for the sesamoid bone of the first joint of the great toe.

Albage'nzi. *Albagiazi.* An Arabic name for the os sacrum.

Albagras nigra. So Avicenna names the lepra ichthyosis. Others call it lepra Græcorum.

Albame'ntum. (From *albus*, white.) The white of an egg.

Alba'num. Urinous salt.

Alba'ra. (Chald.) The white leprosy.

Albaras. Arsenic. A white pustule.

Alba'tio. (From *albus*, white.) *Albificatio.* The calcination or whitening of metals.

A'lberas. (Arab.) White pustules on the face: also staphisagria, because its juice was said to remove these pustules.

Albe'ston. Quick lime.

A'lbetad. Galbanum.

A'lbi sublima'ti. Muriated mercury.

ALBICA'NTIA CO'RPORA. (From *albico*, to grow white.) The glands of a white colour which are usually called Willis's glands, in the brain.

A'lbimec. Orpiment. See *Arsenic.*

Albi'num. See *Gnaphalium.*

ALBI'NUS, Be'rnard Sie'gfred, son of a physician, and professor at Leyden of the same name, was born near the end of the 17th century, and prosecuted his studies with so much zeal and success, that he was appointed, on the recommendation of Boerhaave, professor of anatomy and surgery, when only 20 years old. This office he filled for half a century, and acquired a greater reputation than any of his predecessors. He has left several valuable anatomical works; and particularly very accurate descriptions, and plates of the muscles and bones, which are still highly esteemed.

A'lbor. Urine.

A'lbora. A sort of itch; or rather of leprosy. Paracelsus says, it is a complication of the morphew, serpigo, and leprosy. When cicatrices appear in the face like the serpigo, and then turn to small blisters of the nature of the morphew, it is the albora. It terminates without ulceration, but by fetid evacuations in the mouth and nostrils; it is also seated in the root of the tongue.

Albo'rea. Quicksilver.

A'lbot. A crucible.

Albo'tai. Turpentine.

A'lbotar. Turpentine.

A'lbotat. White lead.

A'lbotim. Turpentine.

A'leotis. A cutaneous phlegmon or boil.

ALBUCA'SIS, an Arabian physician and surgeon, of considerable merit, who lived about the beginning of the twelfth century. He has copied much from preceding writers, but added also many original observations; and his works may be still perused with pleasure. He insisted on the necessity of a surgeon being skilled in anatomy, to enable him to operate with success, as well as acquainted with the materia medica, that he may apply his remedies with propriety. He appears to have extracted polypi from the nose, and performed the operation of bronchotomy. He is the first who left distinct descriptions and delineations of the instruments used in surgery, and of the manner of employing them.

Albugi'nea o'culi. (From *albus*, white.) See *Adnata tunica.*

Albugi'nea te'stis. (*Albuginea*; from *albus*, white; so called on account of its white colour.) *Tunica albuginea testis.* The innermost coat of the testicle. It is a strong, white, and dense membrane, immediately covering the body or substance of the testicle. On its outer surface it is smooth, but rough and uneven on the inner.

Albu'ginous humour. The aqueous humour of the eye.

Albu'go oculo'rum. A white opacity of the cornea of the eye. The Greeks named it *leucoma*; the Latins, *albugo*, *nebula*, and *nubecula*; some ancient writers have called it *pterygium*, *janua oculi*, *onyx*, *unguis*, and *ægides*. It is a variety of Cullen's *Caligo Corneæ.*

Albuhar. White lead.

A'lbum ba'lsamum. The balsam of copaiba.

A'lbum græ'cum. The white dung of dogs. It was formerly applied as a discutient, to the inside of the throat, in quinsies, being first mixed with honey: medicines of this kind have long since justly sunk into disuse.

A'lbum o'lus. Lamb's lettuce, or corn-sallad. The Valeriana locusta of Linnæus.

ALBU'MEN. *Albumine.* Coagulable lymph. Albumen is very abundant in the animal kingdom. It is the principal constituent part of the serum of the blood, and the lymphatic fluid. It forms the cheese in milk, and makes up the greater part of the white of eggs. It is composed of carbon, hydrogen, azot, and oxygen; and sometimes contains phosphorus, and somewhat of calcareous earth.

ALBU′MEN O′VI. *Albugo ovi. Albumen; albor ovi, ovi albus liquor, ovi candidum, albamentum, clareta.* The white of an egg.

A′LCAHEST. An Arabic word to express an universal dissolvent, which was pretended to by Paracelsus and Helmont. Some say that Paracelsus first used this word, and that it is derived from the German words *al* and *geest*, i. e. *all spirit:* and that Van Helmont borrowed the word, and applied it to his invention, which he called the universal dissolvent.

A′LCALI. (Arab.) See *Alkali.*

ALCALIZATION. The impregnating any spirituous fluid with an alkali.

ALCANNA. (Indian word.) See *Anchusa.*

A′LCAOL. The solvent for the preparation of the philosopher's stone.

A′LCEA. (From αλκη, strength.) The name of a genus of plants in the Linnæan system. Class, *Monadelphia.* Order, *Polyandria.* Hollyhock.

A′LCEA ÆGYPTI′ACA VILLO′SA. See *Hibiscus abelmoschus.*

A′LCEA I′NDICA. See *Hibiscus abelmoschus.*

A′LCEA RO′SEA. Common hollyhock. The flowers of this beautiful tree are said to possess adstringent and mucilaginous virtues. They are seldom used medicinally.

A′LCEBAR. See *Lignum Aloes.*

A′LCEBRIS VI′VUM. See *Sulphur vivum.*

A′LCHABRIC. Sulphur vivum.

A′LCHACHIL. Rosemary.

A′LCHARITH. Quicksilver.

A′LCHIEN. This word occurs in the Theatrum Chemicum, and seems to signify that power in nature by which all corruption and generation are effected.

ALCHEMI′LLA. (So called because it was celebrated by the old alchemists.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.* Ladies' mantle.

2. The pharmacopœial name of the plant called ladies' mantle. *Alchemilla vulgaris; foliis lobatis* of Linnæus. It was formerly esteemed as a powerful adstringent in hæmorrhages, fluor albus, &c. given internally.

ALCHEMI′LLA VULGA′RIS. See *Alchemilla.*

ALCHIMELEC. (Heb.) The Egyptian melilot.

A′LCHEMY. *Alchemia. Alchimia. Alkima.* That branch of chemistry which relates to the transmutation of metals into gold; the forming a panacea or universal remedy; an alkahest, or universal menstruum; an universal ferment; and many other absurdities.

A′LCHIBRIC. Sulphur.

ALCHIMI′LLA. See *Alchemilla.*

A′LCHITRON. Oil of Juniper; also the name of a dentifrice of Messue.

A′LCHUTE. See *Morum.*

A′LCHYMY. Alchemy.

A′LCHLYS. A speck on the pupil of the eye, somewhat obscuring vision.

A′LCIMAD. Antimony.

A′LCOB. Sal-ammoniac, or muriat of ammonia.

ALCO′CALUM. (Perhaps Indian.) Artichoke, or cinara.

A′LCOFOL. Antimony.

A′LCOHOL. See *Alkohol.*

A′LCOLA. (Heb.) The aphthæ, or thrush. Paracelsus gives this name to tartar, or excrement of urine, whether it appears as sand, mucilage, &c.

ALCOLI′TA. Urine.

ALCO′NE. Brass.

A′LCOR. Æs ustum.

A′LCTE. It is the name of a plant mentioned by Hippocrates. Foesius thinks it is the elder.

ALCU′BRITH. Sulphur.

ALCYO′NIUM. Bastard sponge, a spongy plant-like substance, which is met with on the sea-shore: it is of different shapes and colours. It is difficult to say what the Greeks called by this name. Dioscorides speaks of five sorts of it. They are calcined with a little salt, as dentifrices, and are used to remove spots on the skin.

Alder-tree. See *Betula Alnus.*

Alder, berry-bearing. See *Rhamnus Frangula.*

ALDER WINE. When well fermented, and having a proper addition of raisins in its composition, is frequently a rich and strong liquor; it keeps better than many of the other made-wines, often for a number of years, and was formerly supposed to possess many medical virtues; but these experience does not seem to sanction: and the virtues of the alder, like those of many other simples formerly prized, have sunk into oblivion.

ALE. *Cerevisia. Liquor cereris. Vinum hordeaceum.* Barley wine. A fermented liquor made from malt and hops, and chiefly distinguished from beer, made from the same ingredients, by the quantity of hops used therein; which is greater in beer, and therefore renders the liquor more bitter, and fitter for keeping. Ale, when well fermented, is a wholesome beverage, and seems only to disagree with those subject to asthma, or any disorder of the respiration, or irregularity in the digestive organs. The old dispensatories enumerate several medicated ales, such as *cerevisia oxydorica,* for the eyes; *cerevisia antiarthritica,* against the gout; *cephalica, epileptica,* &c.

ALEARA. A cucurbit.

ALE′BRIA. (From *alo,* to nourish.) Nourishing foods, or medicines.

A′LEC. *Alech.* Vitriol.

ALE′CHARITH. Mercury.

ALEI′MMA. (From αλειφω, to anoint.) An ointment.

ALEI′ON. (’Αλείον, copious.) Hippocrates uses this word as an epithet for water.

Alei′pha. (From ἀλειφω, to anoint.) Any medicated oil.

Alelai′on. (From αλς, salt, and ελαιον, oil.) Oil beat up with salt, to apply to tumours. Galen frequently used it.

Ale′ma. (From α, priv. and λιμος, hunger.) Meat, food, or any thing that satisfies the appetite.

ALE′MBIC. (Some derive it from the Arabian particle *al*, and αμβιξ, from αμβαινω, to ascend. Avicenna declares it to be Arab.) Moorshead. A chemical utensil made of glass, metal, or earthen-ware, and adapted to receive volatile products from retorts. It consists of a body, to which is fitted a conical head, and out of this head descends laterally a beak to be inserted into the receiver.

Ale′mbroth. A Chaldee word, importing the key of art. Some explained it by *sal mercurii*, or *sal philosophorum & artis*; others say it is named *alembrot* and *sal fusionis*, or *sal fixionis*. *Alembroth desiccatum* is said to be the *sal tartari*; hence this word seems to signify alkaline salt, which opens the bodies of metals by destroying their sulphurs, and promoting their separation from the ores. From analogy, it is supposed to have the same effect in conquering obstructions and attenuating viscid fluids in the human body. A peculiar earth, probably containing a fixed alkali, found in the island of Cyprus, has also this appellation; and a solution of the corrosive sublimate, to which the muriat of ammonia has been added, is called sal alembroth.

Ale′mzadar. Crude sal ammoniac, or muriat of ammonia.

Ale′mzadat. Crude sal ammoniac, or muriat of ammonia.

Alepe′nsis. A species of ash-tree which produces manna.

A′les. (From αλς, salt.) The name of a compound salt.

Aleu′ron. (From αλεω, to grind.) Meal.

Alexander. See *Trallian.*

Alexanders, common. This plant, *Smyrnium olusatrum* of Linnæus, was formerly cultivated for salads. It is now superseded by celery.

Alexanders, round-leaved. *Smyrnium perfoliatum* of Linnæus. The blanched stalks of this species are far preferable to those of common alexanders, and are esteemed as stomachic and nervine.

Alexa′ndria. *Alexandrina.* The bay-tree, or laurel, of Alexandria.

Alexa′ndrium. *Emplastrum viride.* A plaster described by Celsus, made with wax, alum, &c.

Alexica′ca. (From αλεξω, to drive away, and κακον, evil.) *Alexicacum.* An antidote, or amulet, to resist poison.

Alexipha′rmics. (*Alexipharmica*, sc. *medicamenta*, from αλεξω, to expel, and φαρμακον, a poison.) *Antipharmica. Caco-alexiteria.* Medicines supposed to preserve the body against the power of poisons, or to correct or expel those taken. The antients attributed this property to some vegetables, and even waters distilled from them. The term, however, is now disused.

Alexipyre′ticum. (From αλεξω, to drive away, and πυρετος, fever.) A febrifuge. A remedy for fever.

Alexipy′retos. *Alexipyretum.* The same as alexipyreticum.

Ale′xir. An elixir.

Alexite′ria. Preservatives from contagion.

Alexite′rium. (From αλεξω, to expel, and τηρεω, to preserve.) A preservative medicine against poison, or contagion.

Alfa′cta. Distillation.

Alfa′tide. Muriat of ammonia.

Alfa′sra. *Alphesara.* Arabic terms for the vine.

A′lfadas. *Alfides.* Cerusse.

A′lfol. Muriat of ammonia.

A′lfusa. Tutty.

A′lgali. A catheter. Also nitre.

A′lgarah. See *Anchilops.*

A′lgaroth. (So called from Victorius Algaroth, a physician of Verona, and its inventor.) *Algarot, Algarothi. Mercurias vitæ. Pulvis Algarothi.* The antimonial part of the butter of antimony, separated from some of its acid by washing it in water. It is violently emetic in doses of two or three grains, and is preferred by many for making the emetic tartar.

Alge′do. (From αλγος, pain.) A violent pain about the anus, perinæum, testes, urethra, and bladder, arising from the sudden stoppage of a virulent gonorrhœa. A term very seldom used.

Alge′ma. (From αλγεω, to be in pain.) *Algemodes. Algematodes.* Uneasiness, pain of any kind.

Alge′riæ. *Algirie.* Lime.

A′lgeroth. See *Algaroth.*

A′lgibic. Sulphur vivum.

A′lgor. A sudden chillness or rigor. A term met with in Sauvage's and Sagar's Nosology.

Algosarel. The Arabian term for the Daucus sylvestris, or carrot.

Alguada. A white leprous eruption.

Alha′gi. (Arab.) A species of *Hedysarum.* The leaves are hot and pungent, the flowers purgative.

Alha′ndala. An Arabian name for colocynth, or bitter apple.

Alha′sef. (Arab.) *Alhasaf.* A sort of fœtid pustule, called also *Hydroa.*

A′lia squi′lla. (From αλιος, belonging to the sea, and σκιλλα, a shrimp.) A prawn.

A′lica. (From *alo*, to nourish. In general signification, a grain; a sort of food admired by the antients; it is not certain whether it is a grain or a preparation of some kind thereof.

A′lices. (From αλιζω, to sprinkle.) Little red spots in the skin, which precede the eruption of pustules in the small-pox.

Aliena′tio mentis. (From *alieno*, to estrange.) *Delirium.* Estrangement of the mind.

Alifo′rmes mu′sculi. Muscles so called from their supposed resemblance to wings. See *Pterygoideus.*

ALIMENTARY CANAL. Alimentary duct. A name given to the whole of those passages which the food passes through from the mouth to the anus. This duct may be said to be the true characteristic of an animal; there being no animal without it, and whatever has it, being properly ranged under the class of animals. Plants receive their nourishment by the numerous fibres of their roots, but have no common receptacle for digesting the food received, or for carrying off the excrements. But in all, even the lowest degree of animal life, we may observe a stomach, if not also intestines, even where we cannot perceive the least formation of any organs of the senses, unless that common one of feeling, as in oysters.

Alimentary duct. The alimentary canal. The thoracic duct is sometimes so called.

Alimos. Common liquorice.

A′limum. See *Arum.*

Alinde′sis. (Ἀλινδησις, from αλινδεμαι, to be turned about.) A bodily exercise, which seems to be rolling on the ground, or rather in the dust, after being anointed with oil. Hippocrates says it hath nearly the same effect as wrestling.

Alipæ′nos. (From α, neg. and λιπαινω, to be fat.) *Alipænum. Alipantos.* An external remedy, without fat or moisture.

Alipa′sma. (From αλειφω, to anoint.) An ointment rubbed upon the body, to prevent sweating.

Alipe. Remedies for wounds in the cheek, to prevent inflammation.

Alipow. A species of turbith, found near Mount Ceti, in Languedoc. It is a powerful purgative, used instead of senna, but is much more active.

Ali′ptæ. (From αλειφω, to anoint.) Servants who anointed the persons after bathing.

Alisanders. See *Smyrnium.*

ALI′SMA. (From αλς, the sea.) Water-plantain. The name of a genus of plants in the Linnæan system. Class. *Hexandria.* Order, *Polygynia.*

Ali′stelis. (From αλς, the sea.) Muriat of ammonia.

A′litt. *Alith.* Asafœtida.

Alkafi′al. Antimony.

A′lkahest. An imaginary universal menstruum, or solvent. See *Alcahest.*

A′lkahest Glaube′ri. Alkaline salts.

A′lkahat Glaube′ri. An alkali.

A′LKALI. (*Alcali*, in Arabic, signifies burnt; or from *al* and *kali*, i. e. the essence, or the whole of kali, the plant from which it was originally prepared, though now derived from plants of every kind.) *Alcali, alafi, alafor, alafort, calcadis.* A term given to substances which possess the following properties: They are incombustible, and soluble in water: they possess an acrid, urinous taste. They unite with another class of bodies called acids, and form new compounds, in which both the acid and alkaline properties are more or less lost. They render oils miscible with water. They change various blue vegetable pigments to green; red to violet, or blue; and yellow to brown. Blue pigments, that have been turned red with acids, are again restored by alkalis to their primitive colours. They attract water and carbonic acid from the atmosphere. They unite to sulphur by fusion, and by means of water. They exert a great solvent power on the cellular membrane and animal fibre. They also corrode woollen cloth, and, if sufficiently concentrated, convert it into a sort of saponaceous jelly.

There are only three kinds of alkalis at present known:

1. The mineral, called *soda*, in the new chemical nomenclature. See *Soda.*

2. The vegetable, called *potassa*, in the new chemical nomenclature. See *Potassa.*

3. *Ammonia*, or the caustic volatile alkali, is the third. See *Ammonia.*

To these, some chemists add barytes, and some other earths: which, agreeing with alkalis in some respects, are properly called alkaline earths.

Potassa and soda, not being converted to the state of vapour, but by a very intense heat, are termed fixed alkalis: but ammonia, existing in the gaseous form at common temperatures, is distinguished by the name of volatile alkali. The two former, when mixed with siliceous substances, and exposed to a strong heat, form a more or less perfect glass. They emit light on the affusion of the dense acids when freed from water.

ALKALESCENT. Slightly alkaline.

Alkali, caustic. An alkali is so called when deprived of the carbonic acid it usually contains, for it then becomes more caustic, and more violent in its action.

A′lkali fi′xum. Those alkalis are so called, that emit no characteristic smell, and cannot be volatilized, but with the greatest difficulty. Two kinds of fixed alkalis have only hitherto been made known, namely, potash and soda. See *Potassa* and *Soda.*

Alkali, fossile. See *Soda.*

Alkali, mineral. (So called because it forms the basis of marine salts.) See *Soda.*

Alkali, vegetable. (So called because it abounds in many vegetables.) See *Potassa.*

Alkali, volatile. (So called because it is volatile, in opposition to the other alkalis, which are fixed.) See *Ammonia.*

ALKALI′NA. A class of substances described by Cullen as comprehending the substances otherwise termed *antacida.* They consist of alkalis, and other substances which neutralize acids. The principal alkalines in use, are the carbonates and subcarbonates of soda and potash, the subcarbonate of ammonia, lime water, chalk, magnesia and its carbonate.

Alkalization. (*Alkalizatio, onis,* f.) Alkalization. The impregnating any thing with an alkaline salt, as spirit of wine, &c.

A'lkanet. (*Alkanah,* a reed, Arab.) Radix Anchusæ.

Alka'nna. See *Anchusa.*

Alkanna vera. See *Lawsonia.*

Alka'sa. *Alksoal.* A crucible.

Alka'nthum. Arsenic.

A'lkant. Quicksilver.

ALKEKE'NGI. (*Alkekengi,* Arab.) The winter-cherry. See *Physalis.*

Alke'rmes. A term borrowed from the Arabs, denoting a celebrated remedy, of the form and consistence of a confection, whereof the kermes is the basis. See *Kermes.*

Alkerva. (Arab.) Castor oil.

ALKOHOL. (An Arabian word, which signifies antimony: so called from the usage of the Eastern ladies to paint their eye-brows with antimony, reduced to a most subtle powder; whence it at last came to signify any thing exalted to its highest perfection.) *Alcohol. Alkol. Spiritus vinosus rectificatus. Spiritus vini rectificatus. Spiritus vini concentratus. Spiritus vini rectificatissimus.* Alkohol is highly rectified spirit of wine, freed from all those aqueous particles which are not essential to it, by duly performing rectification. In its purest state, it is quite colourless, and clear, of a strong and penetrating smell and taste; capable of being set on fire without a wick, and burning with a flame, without leaving a residue, and without smoke and soot. Alkohol is miscible with water in all proportions. It is not known to freeze in any degree of coldness. It is the direct menstruum or solvent of resins. It dissolves, also, the natural balsams. The resinous and various other parts of plants are also soluble in alkohol; hence it is made use of for extracting those parts, and for making the preparations called *elixirs, tinctures, essences,* &c. In England, alkohol is procured by distillation from molasses; in Scotland and Ireland, from an infusion of malt. This last, before its rectification, is termed *whiskey.* In the East-Indies, *arrack* is distilled from rice; in the West-Indies, *rum* from the sugar-cane; and in France and Spain, *brandy* from wine; all these afford alkohol by distillation. On the human solids, alkohol acts as a most violent corrugator and stimulus.

A'lkosor. Camphire.

A'lki plumbi. Supposed to be acetate of lead.

Alkymia. Powder of basilisk.

Allabor. Lead.

Allantoi'des membra'na. (*Allantoides;* from αλλας, a hog's pudding, and ειδος, likeness; because in some brutal animals, it is long and thick.) A membrane of the fœtus, peculiar to brutes, which contains the urine discharged from the bladder.

Alleluia. (Heb. *Praise the Lord.*) The acetosa, or wood-sorrel; so named from its many virtues. See *Oxalis.*

All-good. *English mercury.* The vulgar name for the *Chenopodium bonus Henricus* of Linnæus; a plant which may be boiled for spinach, and which is in no degree inferior to it. See *Chenopodium.*

All-heal. See *Heraclium* and *Stachys.*

ALLIA'RIA. (From *allium,* garlick; from its smell resembling garlick.) Jack-of-the-hedge. Sauce-alone, or stinking hedge-mustard. See *Erysimum.*

A'llicar. Vinegar.

Alli'coa. Petroleum.

Alligatu'ra. A ligature, or bandage.

Allio'ticum. (From αλλιοω, to alter, or vary.) An alterative medicine, consisting of various antiscorbutics. *Galen.*

ALLIUM. (From *oleo,* to smell, because it stinks; or from αλεω, to avoid, as being unpleasant to most people.) Garlick.

1. The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order *Monogynia.* Garlick. Four species of this genus are used medicinally.

2. The pharmacopœial name of garlick. See *Allium Sativum.*

A'llium cepa. The Onion. *Cepa. Allium:—scapo nudo infernè ventricoso longiore, foliis teretibus,* of Linnæus. Dr. Cullen says, onions are acrid and stimulating, and possess very little nutriment. With bilious constitutions they generally produce flatulency, thirst, head ache, and febrile symptoms: but where the temperament is phlegmatic, they are of infinite service, by stimulating the habit and promoting the natural secretions, particularly expectoration and urine. They are recommended in scorbutic cases, as possessing antiscorbutic properties. Externally, onions are employed in suppurating poultices, and suppression of urine in children is said to be relieved by applying them, roasted, to the pubes.

A'llium po'rrum. The Leek or Porret. *Porrum. Allium porrum* of Linnæus. Every part of this plant, but more particularly the root, abounds with a peculiar odour. The expressed juice possesses diuretic qualities, and is given in the cure of dropsical diseases, and calculous complaints.

A'llium sati'vum. Garlick. *Allium. Theriaca rusticorum. Allium:—caule planifolio bulbifero, bulbo composito, staminibus tricuspidatis,* of Linnæus. This species of garlick, according to Linnæus, grows spontaneously in Sicily; but, as it is much employed for culinary and medicinal purposes, it has been long very generally cultivated in gardens. Every part of the plant, but more especially the root, has a pungent acrimonious taste, and a peculiarly offensive strong smell. This odour is extremely penetrating and diffusive; for, on the root being taken into the stomach, the alliaceous scent impregnates the whole system, and is discoverable in the various excretions, as in the urine, perspiration, milk, &c. Garlick is generally allied to the onion, from which it seems only to differ in being more powerful in its effects, and in its active matter, being in a more fixed state. By stimulating the stomach, they both favour digestion, and, as a stimulus, are readily diffused over the system. They may, therefore, be considered as useful condiments with the food of phlegmatic people, or those whose circulation is languid, and secretions interrupted; but with those subject to inflammatory complaints, or where great irritability prevails, these roots, in their acrid state, may prove very hurtful. The medicinal uses of garlick are various; it has been long in estimation as an expectorant in pituitous asthmas, and other pulmonary affections, *unattended* with inflammation. In hot bilious constitutions, therefore, garlick is improper: for it frequently produces flatulence, head-ache, thirst, heat, and other inflammatory symptoms. A free use of it is said to promote the piles in habits disposed to this complaint. Its utility as a diuretic in dropsies is attested by unquestionable authorities; and its febrifuge power has not only been experienced in preventing the paroxysms of intermittents, but even in subduing the plague. Bergius says quartans have been cured by it; and he begins by giving one bulb, or clove, morning and evening, adding every day one more, till four or five cloves be taken at a dose; if the fever then vanishes, the dose is to be diminished, and it will be sufficient to take one, or two cloves, twice a-day, for some weeks. Another virtue of garlick is that of an anthelminthic. It has likewise been found of great advantage in scorbutic cases, and in calculous disorders, acting in these, not only as a diuretic, but, in several instances, manifesting a lithontriptic power. That the juice of alliaceous plants, in general, has considerable effects upon human calculi, is to be inferred from the experiments of Lobb; and we are abundantly warranted in asserting that a decoction of the beards of leeks, taken liberally, and its use preserved in for a length of time, has been found remarkably successful in calculous and gravelly complaints. The penetrating and diffusive acrimony of garlick, renders its external application useful in many disorders, as a rubefacient, and more especially as applied to the soles of the feet, to cause a revulsion from the head or breast, as was successfully practised and recommended by Sydenham. As soon as an inflammation appears, the garlick cataplasm should be removed, and one of bread and milk be applied, to obviate excessive pain. Garlick has also been variously employed externally, to tumours and cutaneous diseases; and, in certain cases of deafness, a clove, or small bulb of this root, wrapt in gauze or muslin, and introduced into the meatus auditorius, has been found an efficacious remedy. Garlick may be administered in different forms; swallowing the clove entire, after being dipped in oil, is recommended as the most effectual; where this cannot be done, cutting it into pieces without bruising it, and swallowing these may be found to answer equally well, producing thereby no uneasiness in the fauces. On being beaten up, and formed into pills, the active parts of this medicine soon evaporate: this Dr. Woodville, in his Medical Botany, notices, on the authority of Cullen, who thinks that Lewis has fallen into a gross error, in supposing dried garlick more active than fresh. The syrup and oxymel of garlick, which formerly had a place in the British Pharmacopœias, are now expunged. It may be necessary to notice that, by some, the cloves of garlick are bruised, and applied to the wrists, to cure agues, and to the bend of the arm, to cure the tooth-ache: when held in the hand, they are said to relieve hiccough; when beat with common oil into a poultice, they resolve sluggish humours; and, if laid on the navels of children, they are supposed to destroy worms in the intestines.

A'llium victoria'le. *Victorialis longa.* The root, which when dried loses its alliaceous smell and taste, is said to be efficacious in allaying the abdominal spasms of gravid females.

Allo'choos. (From αλλος, another, and χεω, to pour.) Hippocrates uses this word to mean delirious.

Alloeo'sis. (From αλλος, another.) Alteration in the state of a disease.

Alloeo'tica. (From αλλος, another.) Alteratives. Medicines which change the appearance of the disease.

Allogno'sis. (From αλλος, another, and γινωσκω, to know.) Delirium; perversion of the judgment; incapability of distinguishing persons.

Allo'phasis. (From αλλος, another, and φαω, to speak.) According to Hippocrates, a delirium, where the patient is not able to distinguish one thing from another.

Allotriopha'gia. (From αλλοτριας, foreign, and φαγω, to eat.) A synonym of *pica.* See *Pica.* In Vogel's Nosology it signifies the greedily eating unusual things for food.

ALLOY. By this word, chemists and artificers commonly understand any portion of base metal, or metallic mixture, which is added to lower the more valuable metals, particularly gold and silver; likewise all compounds of metals united by fusion into one seemingly homogeneous mass, unless mercury be present, when they are termed Amalgams.

Allspice. See *Myrtus Pimenta.*

A'lma. Water; and the first motion of a fœtus to free itself from its confinement.

Almabri. A stone-like amber.

A'lmagra. *Bolum cuprum.*

1. Red earth, or ochre, used by the antients as an astringent.

2. Rulandus says it is the same as *Lotio.*

3. In the Theatrum Chymicum, it is a name for the white sulphur of the alchemists.

Almara'nda. *Almakis.* Litharge.

Alma'nda catha'rtica. A plant growing on the shores of Cayenne and Surinam, used by the inhabitants as a remedy for the colic; supposed to be cathartic.

Alma'rcab. (Arab.) Litharge of silver.

Almarca'rida. Litharge of silver.

Alma'rgen. *Almarago.* Coral.

Almarkasi'ta. Mercury.

Alma'rtak. Powder of litharge.

Almata'tica. Copper.

Almeca'site. *Almechasite.* Copper.

Almeaile'tu. A word used by Avicenna, to express a preternatural heat less than that of fever, and which may continue after a fever.

Alme'ne. Sal lucidum, or sal gemmæ.

Almi'sa. Musk.

Almiza'dir. Verdigris, or muriat of ammonia.

Almiza'dar. Muriat of ammonia.

Almond, bitter. See *Amygdalus.*

Almond, common. See *Amygdalus.*

Almond, sweet. See *Amygdalus.*

Almonds of the ears. A popular name for the tonsils, which have been so called from their resemblance to an almond in shape. See *Tonsils.*

Almonds of the throat. A vulgar name for the tonsils.

Alnabati. In Avicenna and Serapion, this word means the *siliquadulcis,* a gentle laxative.

A'lnec. Stannum, or tin.

A'lneric. Sulphur vivum.

A'LNUS. (*Alno,* Ital.) The alder.

The pharmacopœial name of two plants, sometimes used in medicine, though rarely employed in the present practice.

1. *Alnus rotundifolia; glutinosa; viridis;* the common alder-tree. See *Betula.*

2. *Alnus nigra,* vel *frangula;* the black, or berry-bearing alder. See *Rhamnus Frangula.*

A'LOË. (From *ahlah,* a Hebrew word, signifying growing near the sea.) The Aloe.

A genus of plants of the Linnæan system. Class, *Hexandria.* Order, *Monogynia.*

Aloë Caballina. See *Aloës.*

Aloë Guinensis. See *Aloës.*

Aloë perfoliata. See *Aloës.*

Aloë Socotorina. See *Aloës.*

Aloë Zocotorina. See *Aloës.*

ALOES. (*Aloë, es,* f.) *Fel naturæ.* The inspissated juice of the aloe plant. Aloes are distinguished into three species, *socotorine, hepatic,* and *caballine;* of which the two first are directed for officinal use in our pharmacopœias.

The 1st. *Aloë Succotorina. Aloë Zoctorinia.* Succotorine aloes, is obtained from a variety of the *Aloë perfoliata* of Linnæus:—*foliis caulinis dentatis, amplexicaulibus vaginantibus, floribus corymbosis, cernuis, pedunculatis subcylindricis:* it is brought over wrapt in skins, from the Island of Socotora, in the Indian Ocean; it is of a bright surface and in some degree pellucid; in the lump, of a yellowish red colour, with a purplish cast; when reduced into powder, it is of a golden colour. It is hard and friable in very cold weather; but in summer it softens very easily betwixt the fingers. It is extremely bitter, and also accompanied with an aromatic flavour, but not so much as to cover its disagreeable taste. Its scent is rather agreeable, being somewhat similar to that of myrrh. Of late this sort has been very scarce, and its place in a great measure supplied by another variety, brought from the Cape of Good Hope; which is said to be obtained from the Aloë Spicata of Linnæus, by inspissating the expressed juice of the leaves, whence it is termed in the London Pharmacopœia Aloës Spicatæ Extractum.

2. *Aloë hepatica, vel Barbadensis:* the common or Barbadoes or hepatic aloes. This was thought to come from a variety of the *Aloë perfoliata* of Linnæus:—*floribus pedunculatis, cernuis corymbosis, subcylindricis, foliis spinosis, confertis, dentatis, vaginantibus, planis, maculatis:* but Dr. Smith has announced, that it will be shewn, in Sibthorp's Flora Græca, to be from a distinct species, the Aloë vulgaris, or true αλοη, of Dioscorides; and it is therefore termed in the London Pharmacopæia Aloës vulgaris Extractum. The best is brought from Barbadoes in large gourd-shells; an inferior sort in pots, and the worst in casks. It is darker coloured than the socotorine, and not so bright; it is also drier and more compact, though sometimes the sort in casks is soft and clammy. To the taste it is intensely bitter and nauseous, being almost wholly without that aroma which is observed in the socotorine. To the smell it is strong and disagreeable.

3. *Aloë caballina vel Guineensis;* Horse-aloes. This is easily distinguished from both the foregoing by its strong rank smell; in other respects it agrees pretty much with the hepatic, and is now not unfrequently sold in its place. Sometimes it is prepared so pure and bright as scarcely to be distinguishable by the eye, even from the socotorine, but its offensive smell betrays it; and if this also should be dissipated by art, its wanting the aromatic flavour of the finer aloes will be a sufficient criterion. This aloe is not admitted into the materia medica, and is employed chiefly by farriers.

The general nature of these three kinds is nearly the same. Their particular differences only consist in the different proportions of gum to their resin, and in their flavour. The smell and taste reside principally in the gum, as do the principal virtues of the aloes. Twelve ounces of Barbadoes aloes yields nearly 4 ounces of resin, and 8 of gummy extract. The same quantity of socotorine aloes yields 3 ounces of resin and 9 of gummy extract.

Aloes is a well known stimulating purgative, a property which it possesses not only when taken internally, but also by external application. The cathartic quality of aloes does not reside in the resinous part of the drug, but in the gum, for the pure resin has little or no purgative power. Its medium dose is from 5 to 15 grains, nor does a larger quantity operate more effectually. Its operation is exerted on the large intestines, principally on the rectum. In small doses long continued, it often produces much heat, and irritation, particularly about the anus, from which it sometimes occasions a bloody discharge; therefore, to those who were subject to piles, or of an hæmorrhagic diathesis, or even in a state of pregnancy, its exhibition has been productive of considerable mischief; but on the contrary, by those of a phlegmatic constitution, or those suffering from uterine obstructions, (for the stimulant action of aloes, it has been supposed, may be extended to the uterus), and in some cases of dyspepsia, palsy, gout, and worms, aloes may be employed as a laxative with peculiar advantage. In all diseases of the bilious tribe, aloes is the strongest purge, and the best preparations for this purpose are the pilula ex aloë cum myrrhâ, the tinctura aloës, or the extractum colocynthidis compositum. Its efficacy in jaundice is very considerable, as it proves a succedaneum to the bile, of which in that disease there is a defective supply to the intestine either in quantity or quality. Aloes therefore may be considered as injurious where inflammation or irritation exist in the bowels or neighbouring parts, in pregnancy, or in habits disposed to piles; but highly serviceable in all hypochondriac affections, cachectic habits, and persons labouring under oppression of the stomach caused by irregularity. Aromatics correct the offensive qualities of aloes the most perfectly. The canella alba answers tolerably, and without any inconvenience; but some rather prefer the essential oils for this purpose. Dr. Cullen says, "If any medicine be entitled to the appellation of a *stomach purge*, it is certainly aloes. It is remarkable with regard to it, that it operates almost to as good a purpose in a small as in a large dose; that one or two grains will produce one considerable dejection, and 20 grains will do no more, except it be that in the last dose the operation will be attended with gripes, &c. Its chief use is to render the peristaltic motion regular, and it is one of the best cures in habitual costiveness. There is a difficulty we meet with in the exhibition of purgatives, viz. that they will not act but in their full dose, and will not produce half their effect if given in half the dose. For this purpose we are chiefly confined to aloes. Neutral salts in half their dose will not have half their effect; although even from these, by large dilution, we may obtain this property; but besides them and our present medicine, I know no other which has any title to it, except sulphur. Aloes sometimes cannot be employed. It has the effect of stimulating the rectum more than other purges, and with justice has been accused of exciting hæmorrhoidal swellings, so that we ought to abstain from it in such cases, except when we want to promote them. Aloes has the effect of rarifying the blood and disposing to hæmorrhagy, and hence it is not recommended in uterine fluxes. Fœtid gums are of the same nature in producing hæmorrhagy, and perhaps this is the foundation of their emmenagogue power." Aloes is administered either simply in powders, which is too nauseous, or else in composition: — 1. With purgatives, as soap, scammony, colocynth, or rhubarb. 2. With aromatics, as canella, ginger, or essential oils. 3. With bitters, as gentian. 4. With emmenagogues, as iron, myrrh, wine, &c. It may be exhibited in pills as the most convenient form, or else dissolved in wine, or diluted alkohol. The officinal preparations of aloes are the following; — Pilulæ Aloës. Pilula Aloës Composita. Pilulæ Aloës cum Assafœtidâ. Pilula Aloes cum Colocynthide. Pilula Aloes cum Myrrh. Tinctura Aloës, Tinctura Aloes Ætherialis. Tinctura Aloes et Myrrh. Vinum Aloës. Extractum Aloës. Decoctum Aloës Compositum. Pulv. Aloës comp. Pulv. Aloës cum Canell. Pulv. Aloës cum Guaiac. Tinctura Aloës comp. Ext. Colocynth. comp. Tinctura Benzoin. comp. and some others.

Aloeda'ria. (From αλοη, the aloe.) Compound purging medicines, so called from having aloes as the chief ingredient.

Aloephangina. Medicines formed by a combination of aloes and aromatics.

A'loes See *Aloë*.

A'loes spica'tæ extra'ctum. See *Aloë*.

A'loes vulga'ris extra'ctum. See *Aloë*.

Aloetics. Medicines wherein aloes is the chief or fundamental ingredient.

Alogotro'phia. (From αλογος, disproportionate, and τρεφω, to nourish.) Unequal nourishment, as in the rickets.

A'lohar. (Arab.) *Alohoc.* Mercury.

A'loes li'gnum. See *Lignum Aloes.*

Alo'mba. (Arab.) *Alooc.* Plumbum, or lead.

Alo'peces. (From αλωπηξ, the fox.) The psoæ muscles are so called by Fallopius and Vesalius, because in the fox they are particularly strong.

Alopecia. (From αλωπηξ, a fox; because the fox is subject to a distemper that resembles it: or, as some say, because the fox's urine will occasion baldness.) *Athrix depilis. Phalacrotis.* Baldness, or the falling off of the hair; when on the sinciput, *calvities, calvitium.*

Alosa. (From αλισκω, to take; because it is a ravenous fish.) The Shad. See Clupea.

A'losat. *Alosohoc.* Quicksilver.

Alosa'nthi. (From αλς, salt, and ανθος, a flower.) *Alosanthum.* Flowers of salt.

Alphabetum chy'micum. Raymond Lully hath given the world this alphabet, but to what end is difficult to say:

A *significat Deum.*
B ——— *Mercurium.*
C ——— *Salis Petram.*
D ——— *Vitriolum.*
E ——— *Menstruale.*
F ——— *Lunam claram.*
G ——— *Mercurium nostrum.*
H ——— *Salem purum.*
I ——— *Compositum Lunæ.*
K ——— *Compositum Solis.*
L ——— *Terram compositi Lunæ.*
M ——— *Aquam compositi Lunæ.*
N ——— *Ærem compositi Lunæ.*
O ——— *Terram compositi Solis.*
P ——— *Aquam compositi Solis.*
Q ——— *Ærem compositi Solis.*
R ——— *Ignem compositi Solis.*
S ——— *Lapidem Album.*
T ——— *Medicinam corporis rubei.*
U ——— *Calorem fumi secreti.*
X ——— *Ignem siccum cineris.*
Y ——— *Calorem balnei.*
Z ——— *Separationem liquorum.*
Z ——— *Alembicum cum cucurbitâ.*

A'lphanic. *Alphenic.* An Arabian word (signifying tender) for barley-sugar, or sugar-candy.

A'lphita. (*Alphita*, the plural of ἀλφιτον, the meal of barley in general.) By Hippocrates this term is applied to barley-meal either toasted or fried. Galen says that κριμνα is coarse meal, αλευρον is fine meal, and αλφιτα is a middling sort.

Alphi'tidon. *Alphitidum.* It is when a bone is broken into small fragments like *Alphita*, i. e. bran.

Alpho'nsin. The name of an instrument for extracting balls. It is so called from the name of its inventor Alphonso Ferrier, a Neapolitan physician. It consists of three branches, which separate from each other by their elasticity, but are capable of being closed by means of a tube in which they are included.

A'lphus. (αλφος, from αλφαινω, to change; because it changes the colour of the skin.) *Vitiligo alba. Morphæa alba. Lepra maculosa alba.* A species of leprosy, called by the ancients *vitiligo*, and which they divided into *alphus, melas,* and *leuce.* It is produced by a peculiar miasma, which is endemial to Arabia. See *Lepra.*

A'lpini ba'lsamum. Balm of Gilead.

ALPI'NUS, Prosper, a Venetian, born in 1553, celebrated for his skill in medicine and botany. After graduating at Padua, he went to Egypt, and during three years carefully studied the plants of that country, and the modes of treating diseases there; of which he afterwards published a very learned account. He has left also some other less important works. He was appointed physician to the celebrated Andrew Doria; and subsequently botanical professor at Padua, which office he retained till his death in 1616.

A'lrachas. Lead.

Alra'tica. A word used by Albucasis, to signify a partial or a total imperforation of the vagina. It is an Arabic word.

Alsa'mach. An Arabic name for the great hole in the os petrosum.

A'LSINE. (From αλσος, a grove; so called because it grows in great abundance in woods and shady places.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Trigynia.* Chickweed.

A'lsine me'dia. *Morsus gallinæ centunculus.* The name for the plant, called chickweed, which, if boiled tender, may be eaten like spinach, and forms also an excellent emollient poultice.

ALSTON, Charles, born in Scotland in 1683, was early attached to the study of botany, and distinguished himself by opposing the sexual system of Linnæus. He afterwards studied under Boerhaave at Leyden; then returning to his native country, was materially instrumental, in conjunction with the celebrated Alexander Monro, in establishing the medical school at Edinburgh, where he was appointed professor of botany and materia medica. He died in 1760. His "Lectures on the Materia Medica," a posthumous work, abound in curious and useful facts, which will long preserve their reputation.

A'ltafor. Camphire.

A'LTERATIVES. (*Alterantia, sc. medicamenta:* from *altero*, to change.) Those remedies are so called, which are given with a view to re-establish the healthy functions of the animal œconomy, without producing any sensible evacuation.

ALTHÆ'A. (From αλθεω, to heal; so called from its supposed qualities in healing.) Marsh-mallow.

1. The name of a genus of plants of the Linnæan system. Class, *Monadelphia.* Order, *Polyandria.*

2. The pharmacopœial name of the marshmallow. See *Althæa Officinalis.*

Althæ'a officinalis. The systematic name of the marsh-mallow. *Althæa:— foliis simplicibus tomentosis.* The leaves and root are generally selected for use. The mucilaginous matter with which this plant abounds, is the medicinal part of the plant; it is commonly employed for its emollient and demulcent qualities in tickling coughs, hoarseness, and catarrhs, in dysentery, and difficulty and heat of urine. It relaxes the passages in nephritic complaints, in which last case a decoction is the best preparation. Two or three ounces of the fresh roots may be boiled in a sufficient quantity of water to a quart, to which one ounce of gum-arabic may be added. The following is given where it is required that large quantities should be used. An ounce of the dried roots is to be boiled in water enough to leave two or three pints to be poured off for use: if more of the root be used, the liquor will be disagreeably slimy. If sweetened, by adding a little more of the root of liquorice, it will be very palatable. The root had formerly a place in many of the compounds in the pharmacopœias, but now it is only directed in the form of syrup.

Altha′naca. *Althanacha.* Orpiment.

Althebe′gium. An Arabian name for a sort of swelling, such as is observed in cachectic and leuco-phlegmatic habits.

Althe′xis. (From αλθειν, to cure, or heal.) Hippocrates often uses this word to signify the cure of a distemper.

Altihit. So Avicenna calls the *Laserpitium* of the ancients.

A′lud. (Arab.) Aloes.

Aludels. Hollow spheres of stone, glass, or earthenware, with a short neck projecting at each end, by means of which one globe might be set upon the other. The uppermost has no opening at the top. They were used in former times for the sublimation of several substances.

Alum. See *Alumen.*

ALU′MEN. (*Alum.* Arab.) *Assos, azub, aseb, elanula. Sulphas aluminæ acidulus cum potassâ. Super-sulphas aluminæ et potassæ. Argilla vitriolata.* Alum.

A salt formed by the combination of the earth called *alumine*, or pure clay, with sulphuric acid, and a little potash, or ammonia.

The alum of commerce, and that presented for medicinal purposes, is afforded by ores which are dug out of the earth for this purpose, and manufactured by first decomposing the ore, then lixiviating it, evaporating the lixivium, and then crystallizing the alum, which affects the form of tetrahedral pyramids, applied to each other base to base; sometimes the angles are truncated.

The following kinds of alum are met with in the shops:

1. Ice or rock alum. *Alumen commune: alumen crystallinum, rupeum, factitium.* Common alum; fictitious alum; English alum. This is always in very large transparent masses, and derives its name from Rocca in Syria, now called Edessa, in which the earliest manufactory of this salt was established: or from the hardness and size of the masses. This species is not very pure.

2. Roman alum. *Alumen Romanum: alumen rubrum, rutilum, rochi Gallis.* Called roch alum by the French. This species, which is prepared in the territory of Civita-Vecchia, comes in lumps of the size of eggs, covered with a reddish efflorescence.

Alum, when first tasted, imparts a sweetness, but is soon felt to be strongly astringent; on account of which virtue it is of very extensive use in medicine and surgery.

Internally it is used as a powerful astringent in cases of passive hæmorrhages from the womb, intestines, nose, and sometimes lungs. In bleedings of an active nature, i. e. attended with fever, and a plethoric state of the system, it is highly improper. Dr. Percival recommends it in the *colica pictonum* and other chronic disorders of the bowels, attended with obstinate constipation. See Percival's Essays. The dose advised in these cases, is from 5 to 20 grains, to be repeated every four, eight, or twelve hours. When duly persisted in, this remedy proves gently laxative, and mitigates the pain.

Alum is also powerfully tonic, and is given with this view in the dose of 10 grains made into a bolus three times a day, in such cases as require powerful tonic and astringent remedies. Another mode of administering it, is in the form of whey made by boiling a drachm of powdered alum in a pint of milk, for a few minutes, and to be taken in the quantity of a tea-cup full three times a day. Dr. Cullen thinks it ought to be employed with other astringents in diarrhœas. In active hæmorrhagies, as was observed, it is not useful, though a powerful medicine in those which are passive. It should be given in small doses, and gradually increased. It has been tried in the diabetes without success; though, joined with nutmeg, it has been more successful in intermittents, given in a large dose, an hour or a little longer, before the approach of the paroxysm. In gargles, in relaxation of the uvula, and other swellings of the mucous membrane of the fauces, divested of acute inflammation, it has been used with advantage; also in every state of the cynanche tonsillaris. Externally alum is much employed by surgeons as a lotion for the eyes, and is said to be preferable to sulphate of zinc or superacetate of lead in the ophthalmia membranarum. From two to five grains dissolved in an ounce of rose water, forms a proper collyrium. It is also applied as a styptic to bleeding vessels, and to ulcers, where there is too copious a secretion of pus. It has proved successful in inflammation of the eyes, in the form of cataplasm, which is made by stirring or shaking a lump of alum in the whites of two eggs, till they form a coagulum, which is applied to the eye, between two pieces of thin linen rag. This substance is also employed in the form of injection in cases of gleet or fluor albus.

When deprived of its humidity, by placing it in an earthen pan over a gentle fire, till it ceases to bubble, it is termed burnt alum, *alumen exsiccatum*, and is sometimes employed by surgeons to destroy fungous flesh, and is a principal ingredient in most styptic powders. Alum is also applied to many purposes of life; in this country, bakers mix a quantity with the bread, to render it white; this mixture makes the bread better adapted for weak and relaxed bowels; but in opposite states of the alimentary canal, this practice is highly pernicious. The officinal preparations of alum are: Alumen exsiccatum. Solutio sulphat. cupri ammon. Edin. Liq. alum. comp. Lond. Pulv. sulph. alum. comp. E.

Alu'men ca'tinum. A name of potash.

Alu'men exsicca'tum. See *Alumen*.

Alu'men rutilum.
Alu'men commune.
Alu'men crystallinum.
Alu'men rupeum.
Alu'men factitium.
Alu'men romanum.
Alu'men rubrum.
Alu'men ustum.
See *Alumen*.

ALU'MINE. *Alumina.* Earth of alum. Pure clay.

Aluminous earth derives its name from alum, of which it forms the base. It constitutes the greater part of clay, which forms the lower strata of mountains and plains. It arrests the waters, and causes them to rise in springs to the surface of the earth. Alumina enters into the natural composition of the schistus, and all those stones and earths called argillaceous, such as *potter's-clay*, *fuller's-earth*, *lepidolite*, *mica*, *corundum*, &c. Hitherto it has not been found pure any where, except in the garden of the public schools at Halle in Germany.

Properties of pure Alumine. — Alumine is white, and soft to the touch. It is insipid, adheres to the tongue, and occasions a sense of dryness in the mouth. When moistened with a small quantity of water, it forms a tenaceous, ductile, kneadable paste. When heated to redness, it shrinks considerably in bulk, and at last becomes so hard as to strike fire with flint. After being ignited, it is no longer capable of being kneaded with water into a ductile mass. It recovers, however, this property by solution in an acid and precipitation. Alkalies dissolve it in the humid way, and form compounds decomposable by acids. It dissolves slowly in all acids. It possesses a powerful attraction for lime. The most intense heat of our furnaces is not able to melt it, but it becomes fusible when lime is added. Lavoisier has proved that it is capable of entering into a kind of fusion like paste, by the action of oxygen gas; it then cuts glass and resists the file. It absorbs water and carbonic acid from the atmosphere. By its mixture with water and silex it acquires great solidity. It does not unite with any combustible substance, but becomes fused into coloured frits with metallic oxids. Its specific gravity is 2. It is employed in a multitude of arts.

Method of obtaining pure alumine. — Take any quantity of alum of commerce, dissolve it in six parts of boiling distilled water, and add to this solution, when cold, liquid ammonia, till no further precipitate ensues. Then heat the whole nearly to the boiling point for a few minutes, and transfer it on a filter. In proportion as the fluid passes off, pour more water over the precipitate, until it passes tasteless. Let the precipitate obtained, while yet in a pasty state, be transferred into a glass or Wedgwood's bason, and add to it muriatic acid in small quantities at a time, until the whole is dissolved. Then evaporate the solution, till a drop of it, when suffered to cool on a plate of glass, yields minute crystals: on letting it now cool, crystals of alum will be deposited. Remove these crystals by decanting the fluid, and renew the evaporation, until, on further cooling, no more crystals are formed. Nothing now but pure alumine remains in the solution; the fluid may therefore be decomposed by adding to it gradually liquid ammonia till no further precipitate ensues. The precipitate thus obtained, when well washed and dried, is pure alumine.

The process recommended in general by systematic writers, for obtaining alumine differs from this; it consists in decomposing a solution of alum of commerce by an excess of carbonated alkali, washing the obtained precipitate, and exposing it to a sufficient heat to drive off the carbonic acid. This method however is imperfect, for if the alumine thus obtained be heated with charcoal, and a diluted acid is added to the mixture sulphureted hydrogen gas will be liberated. It adheres to the tongue, and emits a peculiar odour when breathed upon. Sure signs that it is not pure.

It must be obvious that alumine cannot be obtained absolutely pure in this manner. For alum is a triple compound, consisting of alumine, potash, and sulphuric acid in excess. When this excess of acid is saturated, by adding to the solution an alkali, or even pure alumine, a highly insoluble salt (sulphate of alumine) is produced, differing from alum only in the proportion of its base. When we therefore gradually add to a solution of alum, a carbonated alkali, the first effect of the alkali is, to saturate the excess of the sulphuric acid, and the precipitate consists principally of the salt which is insoluble in water. A further quantity of the alkali effects instantly a decomposition of part of the salt, which, in proportion as it takes place, becomes mixed with the alumine; and it is thus covered from the further action of the alkali. This being the case, it is obvious that no subsequent washing can do more than separate the sulphate of potash, and therefore the residuum, instead of being pure alumine, contains also a variable proportion of true sulphate of alumine; the sulphuric acid of which becoming decomposed on heating it in contact with charcoal, accounts for the sulphuretted hydrogen gas produced by the affusion of an acid. With the acids it is known to form more than twenty species of neutral salts. Of these only one is used in medicine and surgery, called *alum*, or *aluminous sulphate*. See *Alumen*.

Alu'minous waters. Waters' impregnated with particles of alum.

Alusar. Manna.

ALVEA'RIUM. (From *alveare*, a beehive.) That part of the meatus auditorius externus is so called, which contains the wax of the ear.

ALVE'OLI. (Plural of *alveolus*, a diminutive of *alveus*, a cavity.) *Botrion, bothrion; frena, mortariolum.* The sockets of the teeth.

A'LVEUS COMMU'NIS. The common duct, or communication of the ampullæ of the membranaceous semicircular canals in the internal ear, is so termed by Scarpa.

A'lveus ampulle'scens. Part of the duct conveying the chyle to the subclavian vein.

Alvidu'ca. (From *alvus*, the belly, and *duco*, to draw.) Purging medicines.

Alviflu'xus. (From *alvus*, and *fluo*, to flow.) A diarrhœa, or purging.

A'LVUS. (*Alvus*, i. f. and sometimes, m. *ab alluendo, quâ sordes alluuntur.*) The belly, stomach and entrails.

A'lyce. (From αλυω, to be anxious.) That anxiety which is attendant on low fevers.

Aly'pia. (From α, neg. and λυπη, pain.) A gentle purgation of the humours without pain.

Aly'pias. *Alypum.* A species of spurge, so called because it purges gently and without pain.

Aly'smus. (From αλυω, to be restless.) Restlessness.

Aly'ssum. (From α, neg and λυσσα, the bite of a mad dog: so called because it was foolishly thought to be a specific in the cure of the bite of a mad dog.) Mad-wort. See *Marrubium*.

Aly'ssum Gale'ni. See *marrubium verticillatum*.

Aly'ssum Pli'nii. See *Galium album*.

Aly'ssum verticilla'tum. The *marrubium verticillatum*.

Alze'mafor. Cinnabar.

A'lzum. *Aldum. Aldrum.* The name of the tree which produces gum bdellium according to some ancient authors.

A'ma. (αμα, together.) A word used in composition.

AMA'LGAM. (From αμα, and γαμειν, to marry.) A substance produced by mixing mercury with a metal, the two being thereby incorporated.

Amame'lis. (From αμα, and μηλεα, an apple.) The bastard medlar of Hippocrates.

Amani'tæ. (From α, priv. and μανια, madness; so called, because they are eatable and not poisonous, like some others.) A tribe of fungous productions, called mushrooms, truffles, and morells, and by the French, champignons.

AMA'RA. (*Amara*, sc. *medicamenta*; from *amarus*, bitter.) Bitters.

The principal bitters used medicinally are: the pure bitters, *gentiana lutea; humulus lupulus*; and *quassia amara*: styptic bitters, *cinchona officinalis; croton cascarilla; quassia simarouba*: and aromatic bitters, *artemisia absinthium; anthemis nobilis; hyssopus*. &c.

Ama'ra dul'cis. See *Solanum Dulcamara*.

Ama'racus. (From α, neg. and μαραινω, to decay; because it keeps its virtues a long time.) Marjoram.

A'maranth e'sculent. See *Amaranthus Oleraceus*.

AMARA'NTHUS. (From α, neg. and μαραινω, to decay.) The name of a genus of plants in the Linnæan system.

Amara'nthus olera'ceus. *Esculent Amaranth.* The leaves of this, and several other species are eaten in India the same as cabbage is here.

Amato'ria febris. (From *amo*, to love.) See *Chlorosis*.

Amato'ria venefi'cia. (From *amo*, to love, and *veneficium*, witchcraft.) Philters. Love powders.

Amato'rii. (*Amatorii*, sc *musculi.*) A term given to the muscles of the eye, by which that organ is moved in ogling.

Amatzqui'tl. (Indian.) See *Arbutus Unedo*.

AMAURO'SIS. (Αμαυρωσις: from αμαυροω, to darken or obscure.) *Gutta serena. Amblyopia.* A genus of disease in the class *locales*, and order *dysæsthesiæ* of Cullen. It arises generally from compression of the optic nerves; *amaurosis compressionis*; from debility, *amaurosis atonica*; from spasm, *amaurosis spasmodica*; or from poisons, *amaurosis venenata*.

This is a disease of the eye attended with a diminution or total loss of sight, without any visible injury to the organ, and arising from a paralytic affection of the retina and optic nerve.

The symptoms of gutta serena are noted for being very irregular. In many cases, the pupil is very much dilated, immoveable and of its natural black colour. Sometimes, however, in the most complete and incurable cases, the pupil is of its natural size, and the iris capable of free motion. In some cases, the pupil has a dull, glassy or horny appearance. Sometimes its colour is greenish, occasionally whitish and opake, so as to be liable to be mistaken for an incipient cataract. Richter mentions a degree of strabismus, as the only symptom, except the loss of sight, as invariably attendant on amaurosis.

The blindness produced by the gutta serena, is generally preceded by an imaginary appearance of numerous insects, or substances, like cobwebs, interposing themselves between objects and the eye. The origin of a cataract on the other hand, is usually attended with a simple cloudiness of vision.

Violent contusions of the head, apoplectic fits, flashes of lightning, frequent exposure to the rays of the sun, severe exercise, strong passions, drunkenness, and other causes of paralytic affections, are enumerated as producing this complaint. Sometimes tumours within the cranium, bony projections, &c. have been found compressing the optic nerves: but in many instances no morbid appearance could be traced, whence the defect has been concluded to exist in these.

The disorder is generally difficult to be removed: but is sometimes much benefited by general and local stimulants, persevered in for a considerable time. If there are marks of congestion in the head, local bleeding, active purging and other evacuations would be proper in the first instance. Blisters and issues behind the ear or neck should also be tried. Richter speaks of much success from the use of medicines acting steadily on the bowels, after premising an emetic. Mr. Ware observes, that in some cases the pupil is contracted, indicating probably, internal inflammation; and then the internal use of mercury, especially the oxymuriate, will be most beneficial. Electricity has been sometimes serviceable, taking the aura or sparks, or even gentle shocks; but galvanism is certainly preferable. Errhines are often useful, as the compound powder of asarabacca; Mr. Ware particularly recommends the hydrargyrus vitriolatus of the former London Pharmacopœia. Stimulants have been sometimes usefully applied to the eye itself, as the vapour of oil of turpentine, an infusion of capsicum, &c. Where the intention of a blister is to stimulate, it is best applied to the temple on the affected side.

Amber seed. See *Hibiscus abelmoschus.*

A'MBE. (Αμϐη, the edge of a rock; from αμϐαινω, to ascend.) An old chirurgical machine for reducing dislocations of the shoulder, and so called, because its extremity projects like the prominence of a rock. Its invention is imputed to Hippocrates. The ambe is the most ancient mechanical contrivance for the above purpose. but is not at present employed.

A'mbela. (Arab.) The cornered hazlenut, the bark of which is purgative.

AMBER. *Succinum.* A beautiful bituminous substance, of a yellow or brown colour, either transparent or opake, which takes a good polish, and, after a slight rubbing, becomes so electric, as to attract straws and small bodies; it was called ηλεκτρον (*electrum*) by the antients, and hence the word electricity. When powdered, it emits an agreeable smell. It is dug out of the earth at various depths, and often contains insects in high preservation; a circumstance which proves that it has been liquid. Amber is also found floating on the shores of the Baltic, and is met with in Italy, Sicily, Poland, Sweden, &c. From its colour or opacity it has been variously distinguished; thus white, orange, golden, cloudy amber, &c. An oil is obtained from it, which, as well as its other preparations is occasionally used in medicine against spasmodic diseases. See *Oleum Succini,* and *Succinic Acid.*

AMBERGRIS. (*Ambragrisea.*) A concrete, bituminous substance, of a soft and tenacious consistence, marked with black, and yellow spots, and of an agreeable and strong smell when heated or rubbed. It is found in very irregular masses, floating on the sea near the Molucca islands, Madagascar, Sumatra, on the coast of Coromandel, Brazil, America, China, and Japan. Several American fishermen assured Dr. Schwediaur, that they often found this substance, either among the excrements of the *Physeter macrocephalus*, a species of whale, or in its stomach, or in a vessel near the stomach. The medical qualities of ambergris are stomachic, cordial, and antispasmodic. It is very seldom used in this country.

Amblo'sis. (Αμϐλωσις: from αμϐλοω, to cause abortion.) A miscarriage.

Amblo'tica. (*Amblotica,* sc. *medicamenta,* αμϐλωτικα; from αμϐλοω, to cause abortion.) Medicines which were supposed to occasion abortion.

Amblyo'pia. (From αμϐλυς, dull, and ωψ, the eye.) Hippocrates means by this word, dimness of sight to which old people are subject. Paulus Actuarius, and the best modern writers, seem to think that amblyopia means the same thing as the incomplete amaurosis. See *Gutta serena* and *Amaurosis.*

Amblyo'smus. *Amblytes.* The same.

A'mbo. (Indian.) The mango.

A'mbon. (From σμϐαινω, to ascend.) Celsus uses this term to signify the margin or tip of the sockets in which the heads of the large bones are lodged.

A'mbone, The same as ambe.

A'mbra. Amber. Also an aromatic gum.

A'mbra cinera'cea. (From *cineraceus,* of the colour of ashes.) Ambergris and grey amber.

A'mbra gri'sea. Ambergris.

A'mbram. Amber.

Ambre'tte. See *Hibiscus abelmoschus.*

Ambulati'va. (From *ambulo,* to walk.)

A species of herpes; so called because it walks or creeps as it were about the body.

A'MBULO. (From αμβαλλω, to cast forth.) *Flatus Furiosus.* A periodical flatulent disease, caused, according to Michaelis, by vapours shooting through various parts of the body.

AMBU'STIO. (From *amburo*, to burn.) *Ambustum.* A burn or scald.

AME'LLA. The same as achmella.

AMENORRHŒA. (From α, priv. μην, a month, and ῥεω, to flow.) A partial or total obstruction of the menses in women from other causes than pregnancy and old age. That this excrementitious discharge should be regular as to quantity and quality, and that it should observe the monthly period, is essential to health. When it is obstructed, nature makes her efforts to obtain for it some other outlet. When these efforts of nature fail, the consequence may be, pyrexia, pulmonic diseases, spasmodic affections, hysteria, epilepsia, mania, apoplexia, chlorosis, according to the general habit and disposition of the patient. Dr. Cullen places this genus in the class *locales*, and order *epischeses.* His species are, 1. *Emansio mensium*; that is, when the menses do not appear so early as is usually expected. See *Chlorosis.* 2. *Suppressio mensium*, when, after the menses appearing and continuing as usual for some time, they cease without pregnancy occurring. 3. *Amenorrhœa difficilis, vel Menorrhagia difficilis*, when this flux is too small in quantity, and attended with great pain, &c.

The causes of a suppression of the menses appear mostly to operate by inducing a constriction of the extreme vessels; such as cold, fear, and other depressing passions, an indolent life, the abuse of acids, &c. It is sometimes symptomatic of other diseases, in which considerable debility occurs, as phthisis pulmonalis. When the discharge has been some time interrupted, particularly in persons previously healthy, hæmorrhages will often happen from other outlets, the nose, stomach, lungs, &c. even in some instances a periodical discharge of blood from an ulcer has occurred. The patient generally becomes obstinately costive, often dyspeptic; colicky pains, and various hysterical symptoms likewise are apt to attend. The means of chief efficacy in restoring the uterine function are those calculated to relax spasm, assisted sometimes by such as increase arterial action, particularly in protracted cases. The former will be employed with most probability of success, when symptoms of a menstrual effort appear. They are, especially the hip-bath, fomentations to the hypogastrium, sitting over a vessel of hot water, so that the vapour may be applied to the pudenda; with antispasmodic medicines, as the compound galbanum pill, castor, &c. but especially opium. If the patient be plethoric, venesection should be premised. In cases of long standing, the object will be to bring about a determination of blood to the uterus. This may be accomplished by emmenagogues, of which savine and the lytta are most to be depended upon; though the latter would be improper, if hematuria had occurred. Certain cathartics are also very useful, particularly aloes, which appear to operate especially on the rectum, and thus sympathetically influence the uterus. Electric shocks passed through the hypogastric region, may likewise contribute to the cure.

In cases of scanty and painful menstruation, the means pointed out above as calculated to take off constriction of the uterine vessels, should be resorted to; especially the hip-bath, and the free use of opium.

AME'NTIA. (From α, priv. and *mens* the mind.) Imbecillity of intellect, by which the relations of things are either not perceived, or not recollected. A disease in the class *neuroses*, and order *vesaniæ* of Cullen. When it originates at birth, it is called *amentia congenita*, natural stupidity; when from the infirmities of age, *amentia senilis*, dotage or childishness; and when from some accidental cause, *amentia acquisita.*

American balsam. See *Myroxylon Peruiferum.*

AMERICA'NUM TUBERO'SUM. The potatoe. An American tuberose root. See *Solanum.*

AMETHY'STA PHA'RMACA. (From α, neg. and μεθυ, wine.) Medicines which were said either to prevent or remove the effects of wine. *Galen.*

AMETHY'STUS. (From α, neg. and μεθυσκω, to be inebriated.) The amethyst. A precious stone, so called, because in former times, according to Plutarch, it was thought to prevent drunkenness. *Ruland. in Lex. Chem.*

AMI'CULUM. A little short cloak. It is the same as the amnios, but antiently meant a covering for the pubes of boys, when they exercised in the gymnasium. *Rhodius.*

A'MIDUM. See *Amylum.*

AMINÆ'UM. A wine produced in Aminæa, formerly a province of Italy; called also Salernum. Also a strong wine vinegar. Galen mentions Aminæum Neapolitanum, and Aminæum Siculum.

A'MMI. (Αμμι: from αμμος, sand, from its likeness to little gravel-stones.) 1. The name of a genus of plants in the Linnæan system. 2. The pharmacopæial name of the herb bishop's weed, of which there are two sorts, the *ammi verum* and *vulgare.*

A'MMI MA'JUS. The systematic name for the *ammi vulgare* of the shops. The seeds of this plant, *Ammi majus*, of Linnæus; — *foliis inferioribus pinnatis, lanceolatis, serratis; superioribus, multifidis, linearibus*, are less powerful than those of the *Sison* *ammi*, but were exhibited with the same views.

A'MMI VE'RUM. See *Sison Ammi.*

A'MMI VULGA'RE. See *Ammi majus.*

A'MMION. *Ammium.* Cinnabar.

AMMOCHO'SIA. (From αμμος, sand, and χεω, to pour.) A remedy for drying the body by sprinkling it with hot sand. *Oribasius.*

AMMO'NIA ACETA'TA. See *Liquor acetatis ammoniæ.*

AMMO'NIA MURIA'TA. See *Sal ammoniac.*

AMMO'NIA PRÆPARA'TA. See *Subcarbonas ammoniæ.*

AMMO'NIA. Ammonia-gas. The substance so called, is an aëriform or gaseous body.

Pure ammonia appears to be a compound of hydrogen and nitrogen, rendered gaseous by caloric. If a portion of it well dried be subjected to repeated electrical explosions, its bulk becomes gradually almost doubled, being resolved into hydrogen and nitrogen gases, of which the latter constitutes only one-fourth by measure of the result; and therefore the proportions by weight are about:

18 hydrogen
82 nitrogen

100

If some liquid ammonia be subjected to the galvanic influence in contact with mercury, a substance resembling an amalgam is formed: but whether this be a compound of ammonia and mercury, or consist of the latter united to some element of ammonia, is uncertain. Berzelius who made the discovery, considers the volatile alkali to be a compound of oxygen, and a metallic substance, which he calls ammonium.

Ammonia-gas has a strong and very pungent odour. It extinguishes flame, yet it increases the magnitude of the flame of a taper before extinction, producing a pale yellow colour round its edge. Animals cannot breathe it without death ensuing. It is lighter than atmospheric air, in the proportion of three to five. It tinges yellow vegetable colours brown, and blue ones green. It is rapidly absorbed by cold water; by ardent spirit, essential oils, ether, charcoal, sponge, bits of linen cloth, and all porous bodies.

When a piece of ice is brought in contact with this gas, it melts and absorbs the gas, while at the same time its temperature is increased. It has no effect upon oxygen gas while cold; but when made to pass with it through an ignited tube, it denotates and becomes decomposed. The same is the case with common air. It is also decomposed by phosphorus at high temperatures.

It does not explode when mixed with hydrogen gas. Nitrogen gas has no effect upon it. Atmospheric air does not combine with it at common temperatures, but only mixes with and dilutes it. When made to pass through ignited charcoal, it forms with it a substance called prussic acid. If brought into contact with acid gases, both gases lose their gaseous form, and become concrete. It has no sensible action on earths, or on the *salino terrene* substances. It combines readily with acids, and unites to sulphur, when both are in a state of vapour. It reduces oxides of metals to their metallic state, and is decomposed by them. It is also decomposed by oxigenated muriatic acid gas, &c.—When liquid ammonia is exposed to the temperature of 46 degrees below 0, it crystallizes, and when suddenly cooled down to 68 degrees below 0, it assumes a gelatinous appearance, and has scarcely any odour.

Methods of obtaining Ammonia.—1. Mix together equal quantities of muriate of ammonia and quick-lime, separately powdered; introduce them into a gas-bottle or retort, apply the heat of a lamp, and receive the gas over mercury.

Explanation.—Muriate of ammonia consists of muriatic acid and ammonia; on adding lime to it, a decomposition takes place, the muriatic acid quits the ammonia and unites to the lime, forming muriate of lime, which remains in the retort, and the ammonia flies off in the state of gas.

Remark.—In order to obtain the gas in a state of purity, it is essentially necessary that a considerable quantity of the gas first disengaged, be suffered to escape, on account of the common air contained in the distilling vessel, and in the interstices of the ingredients.

2. Ammonia may likewise be obtained by heating the liquid ammonia of the shops (liquor ammoniæ, *Pharm. Lond.*) in a retort placed in communication with the mercurial pneumatic trough.

In this process the ammonia contained in this liquid combines with caloric, assumes the form of ammonia-gas, and parts with the water to which it was united.

Remark.—The temperature of the fluid must not be carried so high as to cause the water to be converted into vapour, or, if this cannot well be avoided, a small vessel should be interposed between the retort and the receiver, which, when kept cool, may serve to condense the aqueous vapour which is formed, and cause the ammonia-gas to pass in a very pure and dry state.

Ammonia is likewise produced during the spontaneous decomposition of animal and vegetable substances; in these cases it did not pre-exist in them ready formed, but is generated by the union of the hydrogen and nitrogen contained in them.

In combination with water, this alkali forms a solution of, or liquid ammonia, which is called, in the London pharmacopœia, LIQUOR AMMONIÆ.

Take of muriate of ammonia, eight ounces.
Lime newly prepared, six ounces.
Water, four pints.

Pour on the lime a pint of the water; then cover the vessel, and set them by for an hour; then add the muriate of ammonia, and the remaining water previously made boiling hot, and cover the vessel again; strain the liquor when it has cooled; then distil from it twelve fluid ounces of the solution of ammonia. The specific gravity of this solution should be to that of distilled water, as 96 to 100.

Lime is capable of decomposing muriate of ammonia at a temperature much below that of boiling water; so that when the materials are mixed, a solution of ammonia and of muriate of lime is obtained. This being submitted to distillation, the ammonia passes over with a certain portion of the water, leaving behind the muriate of lime dissolved in the rest. The proportion of water directed seems, however, unnecessarily great, which obliges the operator to employlarger vessels than would otherwise suffice. But the process now directed is certainly much easier, more economical, and more uniform in its results, than that of the Pharmacopœia of 1809.

This preparation is colourless and transparent with a strong peculiar smell; it parts with the ammonia in the form of gas, if heated to 130 degrees, and requires to be kept, with a cautious exclusion of atmospherical air, with the carbonic acid of which it readily unites: on this latter account, the propriety of keeping it in small bottles instead of a large one, has been suggested.

This is the *aqua ammoniæ puræ* of the shops, and the *alkali volatile causticum*.

Water of ammonia is very rarely given internally, although it may be used in doses of ten or twenty drops, largely diluted, as a powerful stimulant in asphyxia and similar diseases. Externally, it is applied to the skin as a rubefacient, and in the form of gas to the nostrils, and to the eyes as a stimulant: in cases of torpor, paralysis, rheumatism, syncope, hysteria, and chronic ophthalmia.

The other preparations of ammonia in use are,

1. The sub-carbonate of ammonia. See *Ammoniæ subcarbonas*, and *ammoniæ subcarbonatis liquor*.
2. The acetate of ammonia. See *ammoniæ acetatis liquor*.
3. The muriate of ammonia. See *Sal-ammoniac*.
4. Ferrum ammoniatum.
5. Several tinctures and spirits, holding ammonia in solution.

AMMONI'ACUM. (Αμμονιακον: so called from *Ammonia*, whence it was brought.) *Gum-ammoniac.* A concrete gummy resinous juice, composed of little lumps, or tears, of a strong and somewhat ungrateful smell, and nauseous taste, followed by a bitterness. There has, hitherto, been no information had concerning the plant which affords this drug: but Wildenow considers it to be the *Heracleum gummiferum*, having raised that plant from the seeds, which are sometimes found in the drug. It is imported here from Turkey, and from the East-Indies. Gum-ammoniacum is principally employed as an expectorant, and is frequently prescribed in asthma and chronic catarrh. Its dose is from 10 to 30 grains. It is given in the form of pill or diffused in water, and is frequently combined with squill, or tartarised antimony. In large doses, it proves purgative. Externally, it is applied as a discutient, under the form of plaster, to white swellings of the knee, and to indolent tumours. The officinal preparations are Ammoniacum purificatum: Emplastrum ammoniaci: Empl. ammoniaci cum hydragyro; Mistura ammoniaci.

AMMONI'Æ ACETATIS LIQUOR. Solution of acetate of ammonia; formerly called *Aqua ammoniæ acetæ*. "Take of sub-carbonate of ammonia, two ounces; acetic acid, four pints. Add the acid to the salt, until bubbles of gas shall no longer arise, and mix." The effervescence is occasioned by the escape of carbonic acid gas, which the acetic acid expels, and neutralises the ammonia.

If the acid rather predominate, the solution is more grateful to the taste; and provided that acid be correctly prepared, the proportions here given will be found sufficient; where the acid cannot be depended on, it will be right to be regulated rather by the cessation of effervescence than by quantity.

This preparation was formerly known in the shops under the name of spirit of Mindererus. When assisted by a warm regimen, it proves an excellent and powerful sudorific; and, as it operates without quickening the circulation, or increasing the heat of the body, it is admissible in febrile and inflammatory diseases, in which the use of stimulating sudorifics are attended with danger. Its action may likewise be determined to the kidneys, by walking about in the cool air. The common dose is half an ounce, either by itself, or along with other medicines, adapted to the same intention.

Ammóniæ carbónas. See *Ammoniæ subcarbonas.*

Ammóniæ Liquor. See *Ammonia.*

Ammóniæ múrias. See *Sal-ammoniac.*

AMMO'NIÆ SUBCARBO'NAS. *Ammoniæ carbonas.* Subcarbonate of ammonia. This preparation was formerly called *ammonia præparata*, and *sal volatilis salis ammoniaci*, and *sal volatilis*. It is made thus:—take of muriate of ammonia, a pound; of prepared chalk, dried, a pound and a half. Reduce them separately to powder; then mix them together, and sublime in a heat gradually raised, till the retort becomes red. In this preparation a double decomposition takes place, the carbonic acid of the chalk uniting with the ammonia, and forming subcarbonate of ammonia, which is volatilised, while muriate of lime remains in the vessel.

This salt possesses nervine and stimulating powers, and is highly beneficial in the dose of from two to eight grains, in nervous affections, debilities, flatulency, and acidity from dyspepsia.

Ammo'niæ subcarbona'tis liquor. *Liquor ammoniæ carbonatis.* Solution of subcarbonate of ammonia. The *aqua ammoniæ* of the Pharm. Lond. 1787. "Take of subcarbonate of ammonia, four ounces; distilled water, a pint. Dissolve the subcarbonate of ammonia in the water, and filter the solution through paper." This preparation possesses the properties of ammonia in its action on the human body. See *Ammoniæ subcarbonas.*

Ammo'nion. (From *αμμος*, sand.) Aëtius uses this term to denote a collyrium of great virtue in many diseases of the eye, which was said to remove sand or gravel from the eyes.

AMMO'NIUM. Berzelius has given this name to a supposed metal which with oxygen he conceives to form the alkali called ammonia. See *Ammonia.*

Amne'sia. (From *α*, priv. and *μνησις*, memory.) *Amnestia.* Forgetfulness; mostly a symptomatic affection.

Amne'stia. See *Amnesia.*

A'MNIOS. *Amnion.* (From *αμνος*, a lamb, or lamb's skin.) The soft internal membrane which surrounds the fœtus. It is very thin and pellucid in the early stage of pregnancy, but acquires considerable thickness and strength in the latter months. The amnios contains a thin watery fluid, in which the fœtus is suspended. In the abortion of the early months, we find the quantity of this fluid very great, in proportion to the whole ovum, and the amnios forms a delicate and almost gelatinous substance, and is a provision for the regular presentation of the head of the child; for now, the fœtus being suspended in the fluid, and hanging by the umbilicus, and the head and upper part of the body greatly preponderating, it takes that position with the head presenting to the orifice of the womb, which is necessary to natural and safe labour, the fœtus being prevented from shifting, in the latter months by the closer embracing of the child with the uterus.

AMNIO'TIC A'CID. Vauquelin and Buniva have discovered a peculiar acid in the liquor of the amnios of the cow, to which they have given the name of amniotic acid.

It exists in the form of a white pulverulent powder. It is slightly acid to the taste, but sensibly reddens vegetable blues. It is difficulty soluble in cold, but readily soluble in boiling water, and in alcohol. When exposed to a strong heat, it exhales an odour of ammonia and of prussic acid. Assisted by heat, it decomposes carbonate of potash, soda, and ammonia. It produces no change in the solutions of silver, lead, or mercury, in nitric acid.

Amniotic acid may be obtained by evaporating the liquor of the amnios of the cow to a fourth part, and suffering it to cool; crystals of amniotic acid will be obtained in considerable quantity.

Whether this acid exists in the liquor of the amnios of other animals, is not yet known.

AMO'MUM. (From an Arabian word, signifying a pigeon, whose foot it was thought to resemble.) The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

Amo'mum verum. True stone parsley. The fruit is about the size of a grape, of a strong and grateful aromatic taste, and penetrating smell. The seeds have been given as a carminative.

Amo'mum cardamo'mum. The former systematic name for the *cardamomum minus.* See *Elettaria cardamomum.*

Amo'mum gra'num paradisi. The systematic name of the plant which affords the grains of paradise. *Cardamomum majus. Meleguetta maniguetta. Cardamomum piperatium.* They are angular reddish brown seeds, smaller than pepper, and resembling very much the seeds of the cardamomum minus. They are extremely hot, and similar in virtue to pepper.

Amo'mum zingiber. The former systematic name of the plant which affords ginger. See *Zingiber Officinale.*

Amo'rge. See *Amurca.*

Ampelosa'gria. From *αμπελος*, a vine, and *αγριος*, wild.) See *Bryonia.*

Amphemeri'nos. (From *αμφι*, about, and *ημερα*, a day.) *Amphemerina.* A quotidian fever. A species of ague.

AMPHIARTHRO'SIS. (*Αμφιαρθρωσις*: from *αμφι*, both, and *αρθρωσις*, an articulation; so called from its partaking both of diarthrosis and synarthrosis.) A mixed species of connexion of bones, which admits of an obscure motion, as is observed in the metacarpal and metatarsal bones, and the vertebræ.

Amphibious. (From *αμφι*, *ambo*, and *βιος*, *vita.*) Animals are thus called, that live both on land and in the water. The *amphibious* animals, according to Linnæus, are a class whose heart is furnished with one ventricle and one auricle, in which respiration is in a considerable degree voluntary.

Amphiblestroi'des. (From *αμφιβληστρον*, a net, and *ειδος*, a resemblance.) The retina, or net-like coat of the eye.

Amphibra'nchia. (From *αμφι*, about, and *βραγχια*, the jaws.) The fauces or parts about the tonsils, according to Hippocrates and Foësius.

Amphicau'stis. (From αμφι, about, and καυςις, ripe corn, *pudendum muliebre.*) A sort of wild barley. Eustachius says it was also to express the private parts of a woman.

Amphideon. (From αμφι, on both sides, and δαιω to divide.) *Amphidæum. Amphidium.* The os tincæ, or mouth of the womb, which opens both ways, was so called by the antients.

Amphidiarthro'sis. The same as amphiarthrosis.

Amphimeri'na. (From αμφι, about, and ημερα a day.) An intermitting fever of the quotidian kind.

Amphime'trion. (From αμφι, about, and μητρα, the womb.) *Amphimetrium.* The parts about the womb. *Hippocrates.*

A'mphiplex. (From αμφν, about, and ϖλεκτω, to connect.) According to Rufus Ephesius, the part situated between the scrotum and anus, and which is connected with the thighs.

Amphipneu'ma. (From αμφι, about, and ϖνευμα, breath.) A difficulty of breathing. Dyspnœa. *Hippocrates.*

Amphi'polos. (From αμφι, about, and ϖολεω, to attend.) *Amphipolus.* One who attends the bed of a sick person, and administers to him. *Hippocrates.*

Amphismi'la. (From αμφι, on both sides, and σμιλη, an incision-knife.) A dissecting knife, with an edge on both sides. *Galen.*

AMPU'LLA. (αμβολλα, from αναβαλλω, to swell out.) A bottle.

1. All bellied vessels are so called in chemistry, as bolt-heads, receivers, cucurbits, &c.

2. In anatomy this term is applied by Scarpa to the dilated portions of the membranaceous semicircular canals, just within the vestibulum of the ear.

Ampulle'scens. (From *ampulla*, a bottle.) The most tumid part of Pecquet's duct is called alveus ampullescens.

Amputa'tio. (From *amputo*, to cut off.) *Ectome.* A surgical operation, which consists in the removal of a limb or viscus; thus we say a leg, a finger, the penis, &c. when cut off, are amputated; but when speaking of a tumour, or excrescence, it is said to be dissected out or removed.

Amule'tum. (From αμμα, a bond; because it was tied round the person's neck; or rather from αμυνω, to defend.) An amulet, or charm; by wearing which the person was supposed to be defended from the admission of all evil; in particular, an antidote against the plague.

Amu'rca. (From αμεργω, to press out.) *Amorge.* A small herb, whose expressed juice is used in dying. Also the sediment of the olive, after the oil has been pressed from it; recommended by Hippocrates and Galen as an application to ulcers.

Amu'tica. (From αμυττω, to scratch.) Medicines that, by vellicating or scratching, as it were, the bronchia, stimulate it to the discharge of whatever is to be thrown off the lungs.

A'myche. (From αμυσσω, to scratch.) A superficial laceration or exulceration of the skin: a slight wound. *Hippocrates.*—Scarification. *Galen.*

Amy'ctica. (From αμυσσω, to vellicate.) Medicines which stimulate and vellicate the skin, according to Cælius Aurelianus.

AMY'GDALA. (Αμυγδαλη, from αμυσσω, to lancinate; so called, because after the green husk is removed from the fruit, there appear upon the shell certain fissures, as it were lacerations.) The almond. See *Amygdalus.*

Amy'gdala dulcis. See *Amygdalus.*

Amy'gdala ama'ra. See *Amygdalus.*

Amy'gdalæ. The tonsils, so called from a supposed resemblance to almonds.

AMY'GDALUS. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Monogynia.* The almond-tree.

Amy'gdalus commu'nis. The pharmacopœial name of the common almond. *Amygdalus communis* of Linnæus:—*foliis serratis infimis glandulosis, floribus sessilibus geminis.*

The almond is a native of Barbary. The same tree produces either bitter or sweet. Sweet almonds are more in use as food than medicine; but they are said to be difficult of digestion, unless extremely well comminuted. Their medicinal qualities depend upon the oil which they contain in the farinaceous matter, and which they afford on expression, nearly in the proportion of half their weight. It is very similar to olive oil; perhaps rather purer, and is used for the same purposes. The oil thus obtained is more agreeable to the palate than most of the other expressed oils, and is therefore preferred for internal use, being generally employed with a view to obtund acrid juices, and to soften and relax the solids, in tickling coughs, hoarseness, costiveness, nephritic pains, &c. externally it is applied against tension and rigidity of particular parts. The milky solutions of almonds in watery liquors, usually called emulsions, possess, in a certain degree, the emollient qualities of the oil, and have this advantage over pure oil, that they may be given in acute or inflammatory disorders, without danger of the ill effects which the oil might sometimes produce by turning rancid. The officinal preparations of almonds, are the expressed oil, the confection, and the emulsion; to the latter, the addition of gum-arabic is sometimes directed, which renders it a still more useful demulcent in catarrhal affections, stranguries, &c.

Bitter almonds yield a large quantity of oil, perfectly similar to that obtained from sweet almonds, but the matter remaining after the expression of the oil, is more powerfully bitter than the almond in its entire state. Great part of the bitter matter dissolves by the assistance of heat, both in water and rectified spirit; and a part arises also with both menstrua in distillation. Bitter almonds have been long known to be poisonous to various brute animals; and some authors have alleged that they are also deleterious to the human species; but the facts recorded upon this point appear to want further proof. However, as the noxious quality seems to reside in that matter which gives it the bitterness and flavour, it is very probable, that when this is separated by distillation, and taken in a sufficiently concentrated state, it may prove a poison to man, as is the case with the common laurel, to which it appears extremely analogous. Bergius tells us, that bitter almonds, in the form of emulsion, cured obstinate intermittents, after the bark had failed. A simple water is distilled from bitter almonds, after the oil is pressed out, which possesses the same qualities, and in the same degree, as that drawn from cherry-stones. These afforded, formerly, the now exploded aqua cerasorum nigrorum, or black-cherry-water.

Amy'gdalus pe'rsica. The systematic name of the common peach-tree. The fruit is known to be grateful and wholesome, seldom disagreeing with the stomach, unless this organ is not in a healthy state, or the fruit has been eaten to excess, when effects similar to those of the other dulco-acid summer fruits may be produced. The flowers, including the calyx, as well as the corolla, are the parts of the persica used for medicinal purposes. These have an agreeable but weak smell, and a bitterish taste. Boulduc observes, "that when distilled, without addition, by the heat of a water bath, they yield one sixth their weight, or more, of a whitish liquid, which communicates to a considerable quantity of other liquids a flavour like that of the kernels of fruits. These flowers have a cathartic effect, and, especially to children, have been successfully given in the character of a vermifuge; for this purpose, an infusion of a dram of the flowers dried, or half an ounce in their recent state, is the requisite dose. The leaves of the persica are also found to possess an anthelmintic power, and from a great number of experiments appear to have been given with invariable success both to children and adults. However, as the leaves and flowers of the persica manifest, in some degree, the quality of those of the laurocerasus, they ought to be used with caution.

A'myla. (From *amylum*, starch.) Any sort of chemical fæcula, or highly pulverized residuum.

Amy'leon. *Amylion.* Starch.

A'MYLUM. (Αμυλον: from α, priv. and μυλη, a mill; because it was formerly made from wheat, without the assistance of a mill.) Starch. The fæcula of wheat, or starch of wheat. The white substance which subsides from the water that is mixed with wheaten flour. The starch-makers suffer it to remain in the water for a time after it has become acid, which makes it very white and soft to the touch, and scarcely sensible to the taste. As starch forms the greatest part of flour, it cannot be doubted but that it is the principal alimentary substance contained in our bread. In a medical point of view, it is to be considered as a demulcent; and, accordingly, it forms the principal ingredient of an officinal lozenge in catarrhs, and a mucilage prepared from it, often produces excellent effects, both taken by the mouth and in the form of clyster, in dysenteries and diarrhœa, from irritation of the intestines. Milk and starch, with the addition of suet finely shred, and incorporated by boiling, was the soup employed by Sir John Pringle, in dysenteries, where the mucous membrane of the intestines had been abraded. Externally, surgeons apply it as an absorbent in erysipelas.

AMY'RIS. (From α, intensive, and μυρον, ointment, or balm; so called from its use, or smell.) The name of a genus of plants in the Linnæan system, of which two species are used in medicine.

Amy'ris Elemifera. The systematic name of the plant from which it is supposed we obtain the resin called *gum-elemi.* The plant is described as *Amyris elemifera* of Linnæus: *foliis ternis quinato-pinnatisque subtus tomentosis.* Elemi is brought here from the Spanish West Indies: it is most esteemed when softish, somewhat transparent, of a pale whitish colour, inclining a little to green, and of a strong, though not unpleasant smell. It is only used in ointments and plasters, and is a powerful digestive.

Amy'ris opoba'lsamum. The systematic name of the plant from which the balsam of Mecca is obtained. *Balsamum genuinum antiquorum. Balsamelæon. Ægyptiacum balsamum. Balsamum Asiaticum. Balsamum Judaicum. Balsamum Syriacum. Balsamum e Meccâ. Balsamum Alpini. Oleum balsami. Opobalsamum. Xylobalsamum.* Balsam, or balm of Gilead. A resinous juice, obtained by making incisions into the bark of the *Amyris Gileadensis* of Linnæus—*foliis ternatis integerrimis, pedunculis unifloris lateralibus.* Class, *Octandria.* Order, *Monogynia.* The tree grows spontaneously, particularly near to Mecca, on the Asiatic side of the Red Sea. The juice of the fruit is termed *carpobalsamum* in the pharmacopœias, and that of the wood and branches *xylobalsamum.* The best sort is a spontaneous exudation from the tree, and is held in so high estimation by the Turks, that it is rarely, if ever, to be met with genuine among us. The medicinal virtues of the genuine balsam of Gilead, have been highly rated, undoubtedly with much exaggeration. The common balsam of Mecca is scarcely used; but its qualities seem to be very similar to those of the balsam of Tolu, with perhaps more acrimony. The dose is from 15 to 50 drops.

A'myum. (From α, priv. and μυς, muscle.) A limb so emaciated that the muscles scarcely appear.

ANA. ā, or āā. In medical prescriptions it means "of each." See *A.*

Ana'basis. (From αναβαινω, to ascend.) An ascension, augmentation, or increase of a disease, or paroxysm. It is usually meant of fevers. *Galen.* It also signifies equisetum.

Anaba'tica. (From αναβαινω, to ascend.) An epithet formerly applied to the synochus, or continual fever, when it increases in malignity.

Anabe'xis. (From αναβηττω, to cough up.) An expectoration of matter by coughing.

Anable'psis. (From ανα and βλεπω, to see again.) The recovery of sight after it has been lost.

Anablysis. (From ανα and βλυζω, to gush out again.) Ebullition or effervescence.

Ana'bole. (From αναβαλλω, to cast up.) The discharge of any thing by vomit; also dilatation, or extension. *Galen.*

Anabroche'sis. (From ανα and βροχεω, to resorb.) The reabsorption of matter.

Anabrochi'smos. (From αναβροχεω, to reabsorb.) *Anabrochismus.* The taking up and removing the hair on the eyelids, when they become troublesome. *Galen, Ægineta,* and others.

Anabro'sis. (From αναβροσκω, to devour.) A corrosion of the solid parts, by sharp and biting humours. *Galen.*

Anaca'rdium occidenta'le. (From ανα, without, and καρδια, a heart; without heart; because the pulp of the fruit, instead of having the seed inclosed, as is usually the case, has the nut growing out of the end of it.) The cashew-nut. The oil of this nut is an active caustic, and employed as such in its native country; but neither it, nor any part of the fruit, is used medicinally in this country.

Anaca'rdium orienta'le, Anacardium or Malacca bean. *See Avicennia.*

Anacatha'rsis. (From ανα, and καθαιρομαι, to purge up.) An expectoration of pus. It properly denotes a purgation by spitting, in which sense it stands contradistinguished from catharsis, or evacuation downwards. In this sense the word is used by Hippocrates and Galen. Blanchard denotes, by this word, medicines which operate upwards, as vomiting, &c.

Anacatha'rtica. (From ανακαθαιρομαι, to purge upwards. *Thoracia.* Medicines which promote expectoration, or vomits which act upwards.

Ana'chron. Mineral alkali.

Ana'clasis. (From ανακλαω, to bend back.) A reflection or recurvature of any of the members, according to Hippocrates.

Ana'clisis. (From ανακλενω, to recline.) A couch, or sick-bed. *Hippocrates.*

Anacœlia'smus. (From ανα, and κοιλια, the bowels.) A gentle purge, which was sometimes used to relieve the lungs.

Anaco'che. (From ανακωχεω, to retard.) Delay in the administration of medicines; also slowness in the progress of a disease. *Hippocrates.*

Anacolle'ma. (From ανα, and κολλαω, to glue together.) A collyrium made of agglutinant substances, and stuck on the forehead. *Galen.*

Anaconcholi'smos. (From ανακογχυλιζω, to sound as a shell.) A gargarism so called, because the noise made in the throat is like the sound of a shell. *Galen.*

Anacte'sis. (From ανακταομαι to recover.) Restoration of strength; recovery from sickness. *Hippocrates.*

Anacuphi'sma. (From ανακουφιζω, to lift up.) A kind of exercise mentioned by Hippocrates, which consists in lifting the body up and down, like our weigh jolt.

Anacyce'sis. (From ανακυκαω, to mix.) The commixture of substances, or medicines, by pouring one upon another.

Anacy'cleon. (From ανακυκλοω, to wander about.) *Anacycleus.* A mountebank, or wandering quack.

Anacyri'osis, (From ανα, and κυρος, authority.) By this word, Hippocrates means that gravity and authority which physicians should preserve among sick people and their attendants.

Anadiplo'sis. (From αναδιπλοω, to reduplicate.) A reduplication or frequent return of a paroxysm, or disease. *Galen.*

Ana'dosis. (From ανω, upwards, and διδωμι; to give.) A vomit, or the distribution of aliment all over the body; or digestion.

Ana'drome. (From ανω, upwards, and δρεμω, to run.) A pain which runs from the lower extremities to the upper parts of the body. *Hippocrates.*

Anæ'des. (From α, priv. and αιδως, shame.) Shameless. Hippocrates uses this word metaphorically for without restraint, copious; and applies it to water rushing into the aspera arteria.

ANÆSTHE'SIA. (Αναισθησια: from α, priv. and αισθανομαι, to feel.) Loss of the sense of touch. A genius of disease in the class *locales,* and order *dysæsthesiæ* of Cullen.

ANAGA'LLIS. (From αναγελαω, to laugh; because, by curing the spleen, it disposes persons to be cheerful.) 1. The name of a genus of plants in the Linnæan system one species of which was formerly supposed to possess medicinal properties.

2. The pharmacopœial name of the

Anagallis arvensis; foliis indivisis, caule procumbente, of Linnæus, a small and delicately formed plant, which does not appear to possess any particular properties.

Anaga′llis arve′nsis. The systematic name for the *anagallis* of the shops. See *Anagallis.*

Anagargali′ctum. (From ανα, and γαργαρεων, the throat.) A gargarism, or wash for the throat.

Anagargari′stum. The same.

Anagly′phe. (From αναγλυφω, to engrave.) A part of the fourth ventricle of the brain was formerly thus called, from its resemblance to a pen, or style.

Anagno′sis. (From αναγινωσκω, to know.) The persuasion, or certainty, by which medical men judge of a disease from its symptoms. *Hippocrates.*

Ana′graphe. (From αναγραφω, to write.) A prescription or receipt.

Anale′psia. (From ανα, and λαμβανω, to take again.) A species of epilepsy, which proceeds from a disorder of the stomach, and with which the patient is apt to be seized very often and suddenly.

Anale′ntia. A fictitious term used by Paracelsus for epilepsy.

Anale′psis. (From αναλαμβανω, to restore.) A recovery of strength after sickness. *Galen.*

ANALE′PTICA. (From αναλαμβανω, to recruit or recover.) *Analeptics.* Restorative medicines; medicines, or food, which recover the strength which has been lost by sickness.

Analo′sis. (From αναλισκω, to consume.) A consumption, or wasting.

ANA′LYSIS. (Αναλυσις: from αναλυω, to resolve.) The resolution by chemistry, of any matter into its primary and constituent parts. The processes and experiments which chemists have recourse to, are extremely numerous and diversified, yet they may be reduced to two species, which comprehend the whole art of chemistry. The first is, *analysis,* or decomposition; the second, *synthesis,* or composition. In *analysis,* the parts of which bodies are composed, are separated from each other: thus, if we reduce cinnabar, which is composed of sulphur and mercury, and exhibit these two bodies in a separate state, we say we have decomposed, or analysed cinnabar. But if, on the contrary, several bodies be mixed together, and a new substance be produced, the process is then termed chemical composition, or *synthesis:* thus, if by fusion and sublimation, we combine mercury with sulphur, and produce cinnabar, the operation is termed chemical composition, or composition by synthesis.

Anamne′sis. (From αναμιμνησκω, to remember.) Remembrance, or recollection of what has been done. *Galen.*

Anamne′stica. (From the same.) Remedies for bad memory.

ANA′NAS. Called by the Brazilians yayama. The egg-shaped pine-apple. See *Bromelia Ananas.*

Ana′nce. (From αναγκαζω, to compel.) Necessity. It is applied to any desperate operation. *Hippocrates.*

Anaphalanti′asis. (From αναφαλαντος, bald.) A thinness of hair upon the eyebrows. *Gorræus.*

Ana′phora. (From αναφερω, to bring up.) It is applied to a person who spits blood. *Gorræus.*

Anaphory′xis. (From αναφορυσσω, to grind down.) The reducing of any thing to dust, or a very fine powder.

ANAPHRODI′SIA. (From α, priv. and Αφροδισια, the feast of Venus.) Impotence. A genus of disease in the class *locales,* and order *dysorexiæ* of Cullen. It either arises from paralysis, *anaphrodisia paralytica;* or from gonorrhœa, *anaphrodisia gonorrhoica.*

Anaphro′meli. (From α, neg. αφρος, froth, and μελι, honey.) Clarified honey.

Anapla′sis. (From αναπλασσω, to restore again.) A restoration of flesh where it has been lost; also the reuniting a fractured bone. *Hippocrates.*

Anaplero′sis. (From αναπληροω, to fill again.) The restitution, or filling up of wasted parts. *Galen.*

Anaplero′tica. (From the same.) Medicines renewing flesh: incarnatives, or such medicines as fill up a wound so as to restore it to its original shape. *Galen.*

Anapleu′sis. (From αναπλευω, to float upon.) The rotting of a bone, so that it drops off, and lies upon the flesh; exfoliation, or separation of a bone. *Hippocrates, Ægineta,* &c.

Anapneu′sis. (From αναπνεω, to respire.) Respiration.

Ana′pnoe. The same.

Anapto′sis. (From ανάπιπτω, to fall back.) A relapse.

Ana′ptysis. The same as *Anacatharsis.*

Anarrhegni′mia. (From ανα, and ῥηγνυμι, to break again.) *Anarrhexis.* A fracture; the fresh opening of a wound.

Anarrhœ′a. (From ανα, upwards, and ῥεω, to flow.) A flux of humours from below upwards. *Schneider de Catarrho.*

Anarrho′pia. (From ανα, upwards, and ῥεπω, to creep.) The same. *Hippocrates.*

A′NAS DOME′STICA. (From νεω, to swim.) The tame duck. The flesh of this bird is difficult of digestion, and requires that warm and stimulating condiments be taken with it to enable the stomach to digest it.

ANASA′RCA. (From ανα, through, and σαρξ, flesh.) A species of dropsy from a serous humour, spread between the skin and flesh, or rather a general accumulation of lymph in the cellular system. Dr. Cullen ranks this genus of disease in the class *Cachexiæ,* and the order *Intumescentiæ.* He enumerates the following species, viz. 1. *Anasarca serosa*, as when the due discharge of serum is suppressed, &c. 2. *Anasarca oppilata*, as when the blood-vessels are considerably pressed, which happens to many pregnant women, &c. 3. *Anasarca exanthematica*, this happens after ulcers, various eruptive disorders, and particularly after the *erysipelas*. 4. *Anasarca anæmia*, happens when the blood is rendered extremely poor from considerable losses of it. 5. *Anasarca debilium*, as when feebleness is induced by long illness, &c.

This species of dropsy shews itself at first with a swelling of the feet and ankles towards the evening, which, for a time, disappears again in the morning. The tumefaction is soft and inelastic, and, when pressed upon by the finger, retains its mark for some time, the skin becoming much paler than usual. By degrees the swelling ascends upwards, and occupies the trunk of the body; and at last, even the face and eyelids appear full and bloated: the breathing then becomes difficult, the urine is small in quantity, high coloured, and deposits a reddish sediment; the belly is costive, the perspiration much obstructed, the countenance yellow, and a considerable degree of thirst, with emaciation of the whole body, prevails. To these symptoms succeed torpor, heaviness, a troublesome cough, and a slow fever. In some cases, the water oozes out, through the pores of the cuticle; in others, being too gross to pass by these, it raises the cuticle in small blisters; and sometimes the skin, not allowing the water to escape through it, is compressed and hardened, and is at the same time, so much distended as to give the tumour a considerable degree of firmness. For the causes of this disease, see *Hydrops*.

In those who have died of Anasarca, the whole of the cellular membrane has been distended with a fluid, mostly of a serous character. Various organic diseases have occurred; and the blood is said to be altered in consistence, according to the degree of the disease. In general a cure can be more readily effected when it arises from topical or general debility, than when occasioned by visceral obstruction; and in recent cases, than in those of long continuance. The skin becoming somewhat moist, with a diminution of thirst, and increased flow of urine, are very favourable. In some few cases the disease goes off by a spontaneous crisis by vomiting, purging, &c. The indications of treatment in anasarca are, 1. To evacuate the fluid already collected. 2. To prevent its returning again. The first object may be attained mechanically by an operation; or by the use of those means, which increase the action of the absorbents: the second by removing any exciting causes, which may still continue to operate; and at the same time endeavouring to invigorate the system. Where the quantity of fluid collected is such, as to disturb the more important functions, the best mode of relieving the patient is to make a few small incisions with a lancet, not too near each other, through the integuments on the fore and upper part of each thigh; the discharge may be assisted by pressure, and when a sufficient quantity has been evacuated, it is better to heal them by the first intention. In the use of issues or blisters, there is some risk of inducing gangrene, especially if applied to the legs: and the same has happened from scarifications with the cupping instrument. Absorption may be promoted by friction, and bandaging the parts, which will at the same time obviate farther effusion; but most powerfully by the use of different evacuating remedies, especially those which occasion a sudden considerable discharge of fluids. Emetics have been often employed with advantage; but it is necessary to guard against weakening the stomach by the frequent repetition of those which produce much nausea; and perhaps the benefit results not so much from the evacuation produced by the mouth, as from their promoting other excretions; antimonials in particular inducing perspiration, and squill increasing the flow of urine, &c.; for which purpose they may be more safely given in smaller doses: in very torpid habits mustard may claim the preference. Cathartics are of much greater and more general utility: where the bowels are not particularly irritable, the more drastic purgatives should be employed, and repeated as often as the strength will allow; giving for example, every second or third morning jalap, scammony, colocynth or gamboge, joined with calomel or the supertartrate of potash, and some aromatic, to obviate their griping. Elaterium is perhaps the most powerful, generally vomiting as well as purging the patient, but precarious in its strength, and therefore better given in divided doses, till a sufficient effect is produced. Diuretics are universally proper, and may be given in the intervals, where purgatives can be borne, otherwise constantly persevered in; but unfortunately the effects of most of them are uncertain. Saline substances in general appear to stimulate the kidneys, whether acid, alkaline, or neutral; but the acetate, and supertartrate of potash, are chiefly resorted to in dropsy. Dr. Ferriar, of Manchester, has made an important remark of the latter salt, that its diuretic power is much promoted by a previous operation on the bowels, which encourages the more liberal use of it; indeed, if much relied upon, a drachm or two should be given three times or oftener in the day. It is obviously, therefore, best adapted to those cases, in which the strength is not greatly impaired; and the same holds with the nauseating diuretics, squill colchicum and tobacco. The latter has been strongly recommended by Dr. Fowler of York, in the form of tincture; the colchicum as an oxymel by some German physicians; but the squill is most in use, though certainly very precarious if given alone. In languid and debilitated habits, we prefer the more stimulant diuretics, as juniper, horseradish, mustard, garlic, the spiritus ætheris nitrici, &c.; even the oil of turpentine, or the tinctura lyttæ, may be proper, where milder means have failed. Digitalis is often a very powerful remedy, from the utility of which in inflammatory diseases we might expect it to answer best in persons of great natural strength, and not much exhausted by the disorder; but Dr. Withering expressly states that its diuretic effects appear most certainly and beneficially, where the pulse is feeble or intermitting, the countenance pale, the skin cold, and the tumours readily pitting on pressure; which has been since confirmed by other practitioners: it should be begun with in small doses two or three times a day, and progressively increased till the desired operation on the kidneys ensues, unless alarming symptoms appear in the meantime. Opium and some other narcotics have been occasionally useful as diuretics in dropsy, but should be only regarded as adjuvants, from their uncertain effects. In the use of diuretics, a very important rule is, not to restrict the patient from drinking freely. This was formerly thought necessary on theoretical grounds; whereby the thirst was aggravated to a distressing degree, and the operation of remedies often prevented, especially on the kidneys. Sir Francis Milman first taught the impropriety of this practice, which is now generally abandoned: at least so long as the flow of urine is increased in proportion to the drink taken, it is considered proper to indulge the patient with it. Another evacuation, which it is very desirable to promote in anasarca, is that by the skin, but this is with difficulty accomplished: nauseating emetics are the most powerful means, but transient in their effect, and their frequent use cannot be borne. If a gentle diaphoresis can be excited, it is as much as we should expect; and perhaps on the whole most beneficial to the patient. For this purpose the compound powder of ipecacuanha, saline substances, and antimonials in small doses, assisted by tepid drink, and warmth applied to the surface, may be had recourse to. Sometimes much relief is obtained by promoting perspiration locally by means of the vapour bath. Mercury has been much employed in dropsy, and certainly appears often materially to promote the operation of other evacuants, particularly squill and digitalis; but its chief utility is where there are obstructions of the viscera, especially the liver, of which, however, ascites is usually the first result: its power of increasing absorption hardly appears, unless it is carried so far as to affect the mouth, when it is apt to weaken the system so much, as greatly to limit its use. The other indication of invigorating the constitution, and particularly the exhalant arteries, may be accomplished by tonic medicines, as the several vegetable bitters, chalybeates in those who are remarkably pale, and, if there be a languid circulation, stimulants may be joined with them: a similar modification will be proper in the diet, which should be always as nutritious as the patient can well digest; directing also in torpid habits pungent articles, as garlic, onions, mustard, horseradish, &c. to be freely taken, which will be farther useful by promoting the urine. Rhenish wine, or punch made with hollands and supertartrate of potash, may be allowed for the drink. Regular exercise, such as the patient can bear, (the limbs being properly supported, especially by a well-contrived laced stocking,) ought to be enjoined, or diligent friction of the skin, particularly of the affected parts, employed when the tumefaction is usually least, namely, in the morning. The cold bath duly regulated may also, when the patient is convalescent, materially contribute to obviate a relapse.

Anaspa'sis. (From *ανα*, and *σπαω*, to draw together.) Hippocrates uses this word to signify a contraction of the stomach.

Ana'ssytos. (From *ανα*, upwards, and *σευομαι*, to agitate.) *Anassytus.* Driven forcibly upwards. Hippocrates applies this epithet to air rushing violently upwards, as in hysteric fits.

Anasta'ltica. (From *αναϛελλω*, to contract.) Styptic or refrigerating medicines.

Ana'stasis. (From *αναϛημι*, to cause to rise.) A recovery from sickness; a restoration of health. It likewise signifies a migration of humours, when expelled from one place and obliged to remove to another. *Hippocrates.*

ANASTOMO'SIS. (From *ανα*, through, and *ϛομα*, a mouth.) The communication of vessels with one another.

Anastomo'tica. (From *ανα*, through, and *ϛομα*, the mouth.) Medicines which open the pores and mouths of the vessels, as cathartics, diuretics, deobstruents, and sudorifics.

Ana'tes. (From *nates*, the buttocks.) A disease of the anus. *Festus*, &c.

ANA'TOMY. (*Ανατομια*, or *ανατομη*: from *ανα*, and *τεμνω*, to cut up.) *Anerotomy.* The dissection of the human body, to expose the structure, situation, and uses of every part.

Anatomy, comparative. Zootomy. The dissection of brutes, fishes, polypi, plants, &c. to illustrate, or compare them with the structure and functions of the human body.

Anatre'sis. (From *ανα*, and *τιτραω*, to perforate.) A perforation like that which is made upon the skull by trepanning. *Galen.*

Anatri'be. (From *ανατριβω*, to rub.) Friction all over the body.

Anatri′psis. The same. *Moschion de Morb. Mulieb.* and *Galen.*

Ana′tris. *Antaris.* Mercury. *Ruland.*

Ana′tron. (Arab. A lake in Egypt, where it was produced.) Soda, or fixed mineral alkali.

Ana′trope. (From *ανατρεπω*, to subvert.) *Anatrophe. Anatropha.* A relaxation, or subversion of the stomach, with loss of appetite and nausea. Vomiting. Indigestion. *Galen.*

Ana′trum. Soda.

Anau′dia. (From *α*, priv. and *αυδη*, the speech.) Dumbness; privation of voice; catalepsia. *Hippocrates.*

Ana′xyris. (From *αναξυρις*, the sole.) The herb sorrel; so called because its leaf is shaped like the sole of the shoe.

A′ncha. (Arab. to press upon, as being the support of the body.) The thigh. *Avicenna, Forestius,* &c.

A′nchilops. (From *αγχι*, near, and *ωψ*, the eye.) A disease in the inward corner of the eye, called also Ægilops. An incipient fistula lachrymalis.

Anchora′lis proce′ssus. (*Anchoralis*; from *αγκων*, the elbow.) See *Coracoid process.*

Anchovy pear. This fruit, the produce of the *Grias cauliflora* of Linnæus, is eaten by the inhabitants of Jamaica, as a pleasant and refrigerant fruit.

ANCHU′SA. (From *αγχειν*, to strangle; from its supposed constringent quality; or, as others say, because it strangles serpents.) Alkanet.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The name in some pharmacopœias for the alkanet root and bugloss.

Anchusa officinalis. The officinal bugloss. *Anchusa foliis lanceolatis strigosis, spicis secundis imbricatis, calycibus quinque partitis,* of Linnæus: it was formerly esteemed as a cordial in melancholic and hypochondriacal diseases. It is seldom used in modern practice, and then only as an aperient and refrigerant. In some pharmacopœias it is called *Buglossa. Buglossum angustifolium majus. Buglossum vulgare majus. Buglossum sativum.*

Anchusa tinctoria. The systematic name for the anchusa or alkanna of the pharmacopœias. This plant grows wild in France, but is cultivated in our gardens. The root is externally of a deep purple colour. To oil, wax, turpentine, and alkohol, it imparts a beautiful deep red colour, for which purpose it is used. Its medicinal properties are scarcely perceptible.

A′nchyle. See *Ancyle.*

Anchylomeri′sma. (From *αγχυλομαι*, to bend.) Sagar uses this term to express a concretion, or growing together of the soft parts.

ANCHYLO′SIS. (From *αγχυλομαι*, to bend.) A stiff joint.

It is divided into the *true* and *spurious*, according as the motion is entirely or but partly lost. This state may arise from various causes, as tumefaction of the ends of the bones, caries, fracture, dislocation, &c. also dropsy of the joint, fleshy excrescences, aneurisms, and other tumours. It may also be owing to the morbid contraction of the flexor muscles, induced by the limb being long kept in a particular position, as a relief to pain, after burns, mechanical injuries, &c. The rickets, white swellings, gout, rheumatism, palsy, from lead particularly, and some other disorders, often lay the foundation of anchylosis: and the joints are very apt to become stiff in advanced life. Where the joint is perfectly immoveable, little can be done for the patient; but in the spurious form of the complaint, we must first endeavour to remove any cause mechanically obstructing the motion of the joint, and then to get rid of the morbid contraction of the muscles. If inflammation exist, this must be first subdued by proper means. Where extraneous matters have been deposited, the absorbents must be excited to remove them: and where the parts are preternaturally rigid, emollient applications will be serviceable. Fomentations, gentle friction of the joint and of the muscles, which appear rigid, with the camphor liniment, &c. continued for half an hour or more two or three times a day; and frequent attempts to move the joint to a greater extent, especially by the patient exerting the proper muscles, not with violence, but steadily for some time, are the most successful means: but no rapid improvement is to be expected in general. Sometimes in obstinate cases, rubbing the part with warm brine occasionally, or applying stimulant plasters of ammoniacum, &c. may expedite the cure: and in some instances, particularly as following rheumatism, pumping cold water on the part every morning has proved remarkably beneficial. Where there is a great tendency to contraction of the muscles, it will be useful to obviate this by some mechanical contrivance. It is proper to bear in mind, where from the nature of the case, complete anchylosis cannot be prevented, that the patient may be much less inconvenienced by its being made to occur in a particular position; that is in the upper extremities generally a bent, but in the hip or knee an extended one.

A′nci. Those who have a distorted elbow.

Ancirome′le. See *Ancylomele.*

A′ncinar. Borax.

A′ncon. (From *αγκαζομαι*, to embrace; *απο τȣ αγκεισθαι ἑτερῳ οϛεῳ το οϛεον*: because the bones meeting and there uniting, are folded one into another.) The elbow.

ANCONE′US. (*Anconeus*, sc. *musculus;* from αγκων, the elbow.) *Anconeus minor* of Winslow. *Anconeus vel cubitalis Riolani* of Douglas. A small triangular muscle, situated on the back part of the elbow. It arises from the ridge, and from the external condyle of the humerus, by a thick, strong, and short tendon: from this it becomes fleshy, and, after running about three inches obliquely backwards, it is inserted by its oblique fleshy fibres into the back part or ridge of the ulna. Its use is to extend the fore-arm.

Ancone′us exte′rnus. See *Triceps extensor cubiti.*

Ancone′us inte′rnus. See *Triceps extensor cubiti.*

Ancone′us ma′jor. See *Triceps extensor cubiti.*

Ancone′us mi′nor. See *Anconeus.*

Anconoid process. *Processus anconoideus.* (From αγκων, the elbow.) A process of the cubit. See *Ulna.*

A′ncter. (Αγκτηϱ, a bond, or button.) A fibula, or button, by which the lips of wounds are held together. *Gorræus.*

Ancteria′smus. (From αγκτηϱ, a button.) The operation of closing the lips of wounds together by loops, or buttons. *Galen.*

Ancu′bitus. A disease of the eyes with a sensation of sand. *Joh. Anglic. Ros. Ang.*

A′ncyle. (From αγκυλος, crooked.) A species of contraction, called a stiff joint. *Galen.*

ANCYLOBLE′PHARON. (From αγκυλη, a hook, and βλεφαϱον, an eyelid.) A disease of the eye, by which the eyelids are closed together. *Aëtius.*

ANCYLOGLO′SSUM. (From αγκυλη, a hook, and γλωσσα, the tongue.) *Ancylion* of Ægineta. A contraction of the frænulum of the tongue. Tongue-tied.

Ancylome′le. (From αγκυλος, crooked, and μηλη, a probe.) A crooked probe, or a probe with a hook. *Galen, &c.*

Ancylo′sis. See *Anchylosis.*

Ancylo′tomus. (From αγκυλη, a hook, and τεμνω, to cut.) A crooked chirurgical knife, or bistoury. A knife for loosening the tongue. This instrument is no longer in use. *Ægineta, &c.*

A′ncyra. (Αγκυϱα, an anchor.) A chirurgical hook. Epicharmus uses this word for the membrum virile, according to Gorræus.

Ancyroi′des. (From αγκυϱα, an anchor, and ειδος, a likeness.) A process of the scapula was so called, from its likeness to the beak of an anchor. It is the coracoid process. See *Scapula.*

Ancyrome′le. See *Ancylomele.*

Andi′ra. A tree of Brazil, the fruit of which is bitter and astringent, and used as a vermifuge.

Andranato′mia. *Andranatome.* (From ανηϱ, a man, and τεμνω, to cut.) The dissection of the human body, particularly of the male. *M. Aur. Severinus, Zootome Democrit.*

Andrapodocape′lus. (From ανδϱοποδον, a slave, and καπηλος, a dealer.) A crimp. Galen calls by this name the person whose office it was to anoint and slightly to wipe the body, to cleanse the skin from foulness.

A′ndria. (From ανηϱ, a man.) An hermaphrodite. *Bonnet.*

Androcœte′sis. (From ανηϱ, a man, and κοιτεω, to cohabit with.) The venereal act; or the infamous act of sodomy. *Moschion, &c.*

Andro′gynus. (From ανηϱ, a man, and γυνη, a woman.) An effeminate person. *Hipp.* An hermaphrodite.

Andro′machus, of *Crete*, was physician to the Emperor Nero. He invented a composition, supposed to be an antidote against poison, called after him, Theriaca Andromachi, which he dedicated to that Emperor in a copy of Greek verses still preserved. This complicated preparation long retained its reputation, but is now deservedly abandoned.

Andro′nion. *Andronium.* A kind of plaster used by Ægineta for carbuncles, invented by Andron.

Andropogon Schænanthus, *Juncus odoratus. Fœnum camelorum. Juncus aromaticus.* The systematic name of the Camel-hay, or Sweet rush. The dried plant is imported into this country from Turkey and Arabia. It has an agreeable smell, and a warm, bitterish, not unpleasant taste. It was formerly employed as a stomachic and deobstruent.

Andro′tomia. *Androtome.* Human dissection, particularly of the male.

Andry, *Nicholas*, a physician, born at Lyons in 1658. He was made professor of medicine at Paris in 1701, and lived to the age of 84. Besides a Treatise on Worms, and other minor publications, and contributions in the Medical and Philosophical Journals, he was author of a work, still esteemed, called "Orthopedie," or the art of preventing and removing deformities in children; which he proposed to effect by regimen, exercise, and various mechanical contrivances.

Ane′bium. (From αναβαινω, to ascend.) The herb alkanet, so called from its quick growth.

Aneile′sis. (From ανειλεω, to roll up.) *Aneilema.* An involution of the guts, such as is caused by flatulence and gripes. *Hippocrates.*

Ane′mia. (From ανεμος, wind.) Flatulence.

ANE′MONE. (From ανεμος, wind; so named, because it does not open its flowers till blown upon by the wind.) The wind flower. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.*

Ane′mone hepa′tica. The systematic name for the *hepatica nobilis* of the pharmacopœias. *Herba trinitatis.* Hepatica, or herb trinity. This plant possesses mildly adstringent and corroborant virtues, with which intentions infusions of it have been drank as tea, or the powder of the dry leaves given, to the quantity of half a spoonful at a time.

Anemone meadow. See *Anemone pratensis.*

Ane′mone nemoro′sa. The systematic name of the *ranunculus albus* of the pharmacopœias. The bruised leaves and flowers are said to cure tinea capitis applied to the part. The inhabitants of Kamskatka, it is believed, poison their arrows with the root of this plant.

Ane′mone prate′nsis. The systematic name for the *Pulsatilla nigricans* of the pharmacopœias. This plant, *Anemone pedunculo involucrato, petalis apice reflexis, foliis bipinnatis,* of Linnæus: has been received into the Edinburgh pharmacopœia upon the authority of Baron Stoerck, who recommended it as an effectual remedy for most of the chronic diseases affecting the eye, particularly amaurosis, cataract, and opacity of the cornea, proceeding from various causes. He likewise found it of great service in venereal nodes, nocturnal pains, ulcers, caries, indurated glands, suppressed menses, serpiginous eruptions, melancholy and palsy. The plant, in its recent state, has scarcely any smell; but its taste is extremely acrid, and, when chewed, it corrodes the tongue and fauces.

Anence′phalus. (From *α*, priv. and *εγκεφαλος*, the brain.) A monster without brains. Foolish. *Galen de Hippocrate.*

A′neos. A loss of voice and reason.

Anepithy′mia. (From *α*, priv. and *επιθυμια*, desire.) Loss of appetite.

A′neric. *Anerit.* Sulphur vivum.

A′nesis. (From *ανιημι*, to relax.) A remission, or relaxation, of a disease, or symptom. *Aëtius,* &c.

Ane′sum. See *Anisum.*

ANE′THUM. (*Ανηθον*: from *ανευ*, afar, and *θεω*, to run; so called because its roots run out a great way.) Fennel, dill, anet.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the common dill, or anet.

Ane′thum fœni′culum. The systematic name for the *fœniculum* of the shops. Sweet fennel, *Anethum fœniculum, fructibus ovatis* of Linnæus. The seeds and roots of this indigenous plant are directed by the colleges of London and Edinburgh. The seeds have an aromatic smell, and a warm sweetish taste, and contain a large proportion of essential oil. They are stomachic and carminative. The root has a sweet taste, but very little aromatic warmth, and is said to be pectoral and diuretic.

Ane′thum grave′olens. The systematic name for the *Anethum* of the shops. *Anethum fructibus compressis,* of Linnæus. This plant is a native of Spain, but cultivated in several parts of England. The seeds of dill are directed for use by the London and Edinburgh Pharmacopœias: they have a moderately warm, pungent taste, and an aromatic, but sickly smell. There is an essential oil, and a distilled water, prepared from them, which are given in flatulent colics and dyspepsia. They are also said to promote the secretion of milk.

Ane′tica. (From *ανιημι*, to relax.) Paregorics; medicines which assuage pain, according to Andr. Tiraquell.

ANEURI′SMA. (*-matis,* neut. *Ανευϱυσμα*, from *ανευϱυνω*, to dilate.) An aneurism. A preternatural tumour formed by the dilatation of an artery. A genus of disease ranked by Cullen in the class *locales,* and order *tumores.* There are three species of aneurism: 1. The *true aneurism, aneurisma verum,* which is known by the presence of a pulsating tumour. The artery either seems only enlarged at a small part of its tract, and the tumour has a determinate border, or it seems dilated for a considerable length, in which circumstance the swelling is oblong, and loses itself so gradually in the surrounding parts, that its margin cannot be exactly ascertained. The first, which is the most common, is termed *circumscribed true aneurism;* the last, the *diffused true aneurism.* The symptoms of the circumscribed true aneurism, take place as follows: the first thing the patient perceives, is an extraordinary throbbing in some particular situation, and, on paying a little more attention, he discovers there a small pulsating tumour, which entirely disappears when compressed, but returns again as soon as the pressure is removed. It is commonly unattended with pain or change in the colour of the skin. When once the tumour has originated, it continually grows larger, and at length attains a very considerable size. In proportion as it becomes larger, its pulsation becomes weaker, and, indeed, it is almost quite lost, when the disease has acquired much magnitude. The diminution of the pulsation has been ascribed to the coats of the artery losing their dilatable and elastic quality, in proportion as they are distended and indurated; and, consequently, the aneurismal sac being no longer capable of an alternate diastole and systole from the action of the heart. The fact is also imputed to the coagulated blood, deposited on the inner surface of the sac, particularly in large aneurisms, in which some of the blood is always interrupted in its motion. In true aneurisms, however, the blood does not coagulate so soon, nor so often as in false ones. Whenever such coagulated blood lodges in the sac, pressure can only produce a partial disappearance of the swelling. In proportion as the aneurismal sac grows larger, the communication into the artery beyond the tumour is lessened. Hence in this state, the pulse below the swelling becomes weak and small, and the limb frequently cold and œdematous. On dissection, the lower continuation of the artery is found preternaturally small, and contracted. The pressure of the tumour on the adjacent parts, also produces a variety of symptoms, ulcerations, caries, &c. Sometimes an accidental contusion, or concussion, may detach a piece of coagulum from the inner surface of the cyst, and the circulation through the sac be obstructed by it. The coagulum may possibly be impelled quite into the artery below, so as to induce important changes. The danger of an aneurism arrives when it is on the point of bursting, by which occurrence the patient usually bleeds to death; and this sometimes happens in a few seconds. The fatal event may generally be foreseen, as the part about to give way, becomes particularly tense, elevated, thin, soft, and of a dark purple colour. 2. The false or spurious aneurism, *aneurisma spurium*, is always owing to an aperture in the artery, from which the blood gushes into the cellular substance. It may arise from an artery being lacerated in violent exertions: but the most common occasional cause is a wound. This is particularly apt to occur at the bend of the arm, where the artery is exposed to be injured in attempting to bleed. When this happens, as soon as the puncture has been made, the blood gushes out with unusual force, of a bright scarlet colour, and in an irregular stream, corresponding to the pulsation of the artery. It flows out, however, in an even and less rapid stream when pressure is applied higher up than the wound. These last are the most decisive marks of the artery being opened; for blood often flows from a vein with great rapidity, and in a broken current, when the vessel is very turgid and situated immediately over the artery, which imparts its motion to it. The surgeon endeavours precipitately to stop the hæmorrhage by pressure; and he commonly occasions a *diffused false aneurism*. The external wound in the skin is closed, so that the blood cannot escape from it; but insinuates itself into the cellular substance. The swelling thus produced is uneven, often knotty, and extends upwards and downwards, along the tract of the vessel. The skin is also usually of a dark purple colour. Its size increases as long as the internal hæmorrhage continues, and, if this should proceed above a certain pitch, mortification of the limb ensues. 3. The *varicose aneurism, aneurisma varicosum*; this was first described by Dr. W. Hunter. It happens when the brachial artery is punctured in opening a vein: the blood then rushes into the vein, which becomes varicose. Aneurisms may happen in any part of the body, except the latter species, which can only take place where a vein runs over an artery. When an artery has been punctured, the tourniquet should be applied, so as to stop the flow of blood by compressing the vessel above; then the most likely plan of obviating the production of spurious aneurism appears to be applying a firm compress immediately over the wound, and securing it by a bandage, or in any other way, so as effectually to close the orifice, yet not prevent the circulation through other vessels; afterwards keeping the limb as quiet as possible, enjoining the antiphlogistic regimen, and examining daily that no extravasation has happened, which would require the compress being fixed more securely, previously applying the tourniquet, and pressing the effused blood as much as possible into the vessel. If there should be much coldness or swelling of the limb below, it will be proper to rub it frequently with some spirituous or other stimulant embrocation. It is only by trial that it can be certainly determined when the wound is closed; but always better not to discontinue the pressure prematurely. The same plan may answer, when the disease has already come on, if the blood can be entirely, or even mostly, pressed into the artery again; at any rate by determining the circulation on collateral branches it will give greater chance of success to a subsequent operation. There is another mode, stated to have sometimes succeeded even when there was much coagulated blood; namely making strong pressure over the whole limb, by a bandage applied uniformly, and moistened to make it sit closer, as well as to obviate inflammation; but this does not appear so good a plan, at least in slighter cases. If however the tumour be very large, and threatens to burst, or continues spreading, the operation should not be delayed. The tourniquet being applied, a free incision is to be made into the tumour, the extravasated blood removed, and the artery tied both above and below the wound, as near to it as may be safe; and if any branch be given off between, this must be also secured. It is better not to make the ligatures tighter, than may be necessary to stop the flow of blood; and to avoid including any nerve if possible. Sometimes where extensive suppuration or caries has occurred, or gangrene is to be apprehended, amputation will be necessary: but this must not be prematurely resolved upon, for often after several weeks the pulse has returned in the limb below. In the true aneurism, when small and recent, cold and astringent applications are sometimes useful; or making pressure on the tumour, or on the artery above, may succeed; otherwise an operation becomes necessary to save the patient's life; though unfortunately it oftener fails in this than in the spurious kind; gangrene ensuing, or hæmorrhage; this chiefly arises from the arteries being often extensively diseased, so that they are more likely to give way, and there is less vital power in the limb. A great improvement has been made in the mode of operating in these cases by Mr. John Hunter, and other modern surgeons, namely, instead of proceeding as already explained in the spurious aneurism, securing the artery some way above, and leaving the rest in a great measure to the powers of nature. It has been now proved by many instances, that when the current of the blood is thus interrupted, the tumour will cease to enlarge, and often be considerably diminished by absorption. There is reason for believing too, that the cures effected spontaneously, or by pressure, have been usually owing to the trunk above being obliterated. There are many obvious advantages in this mode of proceeding; it is more easy, sooner performed, and disorders the system less, particularly as you avoid having a large unhealthy sore to be healed; besides there is less probability of the vessel being diseased at some distance from the tumour. In the popliteal aneurism, for example, the artery may be secured rather below the middle of the thigh, where it is easily come at. The tourniquet therefore being applied, and the vessel exposed, a strong ligature is to be passed round it; or, which is perhaps preferable, two ligatures a little distant, subsequently cutting through the artery between them, when the two portions contract among the surrounding flesh. It is proper to avoid including the nerve or vein, but not unnecessarily detach the vessel from its attachments. For greater security one end of each ligature, after being tied, may be passed through the intercepted portion of artery, that they may not be forced off. Then the wound is to be closed by adhesive plaster, merely leaving the ends of the ligatures hanging out, which will after some time come away. However it must be remembered that hæmorrhage is liable to occur; when this happens, even three or four weeks after the operation; so that proper precautions are required, to check it as soon as possible; likewise the system should be lowered previously, and kept so during the cure. When a true aneurism changes into the spurious form, which is known by the tumour spreading, becoming harder, and with a less distinct pulsation, the operation becomes immediately necessary. When an aneurism is out of the reach of an operation, life may be prolonged by occasional bleeding, a spare diet, &c.; and when the tumour becomes apparent externally, carefully guarding it from injury. In the varicose aneurism an operation will be very seldom if ever required, the growth of the tumour being limited.

Aneuri′sma spu′rium. See *Aneurisma.*

Aneuri′sma varico′sum. See *Aneurisma.*

Aneuri′sma ve′rum. See *Aneurisma.*

Ane′xis. (From ανεχω, to project.) A swelling, or protuberance.

ANGEIOLO′GIA. (From αγγειον, a vessel, and λογος, a discourse.) A dissertation, or reasoning, upon the vessels of the body.

ANGEIO′TOMY. (From αγγειον, a vessel, and τεμνω, to cut.) The dissection of the blood-vessels of an animal body; also the opening of a vein, or an artery.

Angeioti′smus. (From αγγειον, a vessel, and τεμνω, to cut.) A skiful dissector of the vessels.

ANGE′LICA. (So called from its supposed angelic virtues.) Angelica. 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the garden-angelica.

Ange′lica archange′lica. The systematic name for the *angelica* of the shops. *Angelica foliorum impari lobato* of Linnæus. A plant, a native of Lapland, but cultivated in our gardens. The roots of angelica have a fragrant, agreeable smell, and a bitterish, pungent taste. The stalk, leaves, and seeds, which are also directed in the pharmacopœias, possess the same qualities, though in an inferior degree. Their virtues are aromatic and carminative. A sweetmeat is made, by the confectioners, of this root, which is extremely agreeable to the stomach, and is surpassed only by that ginger.

Angelica, garden. See *Angelica.*

Ange′lica sati′va. See *Angelica sylvestris.*

Ange′lica sylve′stris. *Angelica sativa.* Wild angelica. *Angelica foliis æqualibus ovato-lanceolatis serratis*, of Linnæus. This species of angelica possesses similar properties to the garden species, but in a much inferior degree. It is only used when the latter cannot be obtained. The seeds, powdered and put in the hair, kill lice.

Angelica, wild. See *Angelica sylvestris.*

Angeli′næ co′rtex. The tree from which this bark is procured is a native of Grenada. It has been recommended as an anthelmintic for children.

Angeloca′cos. Myrobalans, or purging Indian plums.

A′ngi. (From *angor*, anguish; because of their pain.) Buboes in the groin. *Fallopius de Morbo Gallico.*

Angiglo′ssus. (From αγκυλη, a hook, and γλωσσα, the tongue.) A person who stammers.

ANGI′NA. (From αγχω, to strangle; because it is often attended with a sense of strangulation.) A sore throat. See *Cynanche.*

Angi′na maligna. See *Cynanche maligna.*

Angi′na parotide′a. See *Cynanche parotidea.*

ANGI'NA PE'CTORIS. *Syncope anginosa* of Dr. Parry. An acute constrictory pain at the lower end of the sternum, inclining rather to the left side, and extending up into the left arm, accompanied with great anxiety. Violent palpitations of the heart, laborious breathings, and a sense of suffocation, are the characteristic symptoms of this disease. — It is found to attack men much more frequently than women, particularly those who have short necks, who are inclinable to corpulency, and who, at the same time, lead an inactive and sedentary life. Although it is sometimes met with in persons under the age of twenty, still it more frequently occurs in those who are between forty and fifty. In slight cases, and in the first stage of the disorder, the fit comes on by going up-hill, up-stairs, or by walking at a quick pace after a hearty meal; but as the disease advances, or becomes more violent, the paroxysms are apt to be excited by certain passions of the mind; by slow walking, by riding on horseback, or in a carriage; or by sneezing, coughing, speaking, or straining at stool. In some cases, they attack the patient from two to four in the morning, or whilst sitting or standing, without any previous exertion or obvious cause. On a sudden, he is seized with an acute pain in the breast, or rather at the extremity of the sternum, inclining to the left side, and extending up into the arm, as far as the insertion of the deltoid muscle, accompanied by a sense of suffocation, great anxiety, and an idea that its continuance, or increase, would certainly be fatal. In the first stage of the disease, the uneasy sensation at the end of the sternum, with the other unpleasant symptoms, which seemed to threaten a suspension of life by a perseverance in exertion, usually go off upon the person's standing still, or turning from the wind; but, in a more advanced stage, they do not so readily recede, and the paroxysms are much more violent. During the fit, the pulse sinks in a greater or less degree, and becomes irregular; the face and extremities are pale, and bathed in a cold sweat, and, for a while, the patient is perhaps deprived of the powers of sense and voluntary motion. The disease having recurred more or less frequently during the space of some years, a violent attack at last puts a sudden period to his existence. Angina pectoris is attended with a considerable degree of danger; and it usually happens that the person is carried off suddenly. It mostly depends upon an ossification of the coronary arteries, and then we can never expect to effect a radical cure. During the paroxysms, considerable relief is to be obtained from fomentations, and administering powerful antispasmodics, such as opium and æther combined together. The application of a blister to the breast is likewise attended sometimes with a good effect. As the painful sensation at the extremity of the sternum often admits of a temporary relief, from an evacuation of wind by the mouth, it may be proper to give frequent doses of carminatives, such as peppermint, carraway, or cinnamon water. Where these fail in the desired effect, a few drops of ol. anisi, on a little sugar, may be substituted.

With the view of preventing the recurrence of the disorder, the patient should carefully guard against passion, or other emotions of the mind: he should use a light, generous diet, avoiding every thing of a heating nature; and he should take care never to overload the stomach, or to use any kind of exercise immediately after eating. Besides these precautions, he should endeavour to counteract obesity, which has been considered as a predisposing cause; and this is to be effected most safely by a vegetable diet, moderate exercise at proper times, early rising, and keeping the body perfectly open. It has been observed that angina pectoris is a disease always attended with considerable danger, and, in most instances, has proved fatal under every mode of treatment. We are given, however, to understand, by Dr. Macbride, that of late, several cases of it have been treated with great success, and the disease radically removed, by inserting a large issue in each thigh. These, therefore, should never be neglected. In one case, with a view of correcting, or draining off the irritating fluid, he ordered, instead of issues, a mixture of lime-water with a little of the spirituous juniperi comp., and an alterative proportion of Huxham's antimonial wine, together with a plain, light, perspirable diet. From this course the patient was soon apparently mended; but it was not until after the insertion of a large issue in each thigh, that he was restored to perfect health.

Angi'na tonsilla'ris. See *Cynanche tonsillaris*.

Angi'na trache'alis. See *Cynanche trachealis*.

ANGIOLO'GIA. (From αγγειον, a vessel, and λογος, a discourse.) The doctrine of the vessels of the human body.

A'nglicus su'dor. (From *Anglia*, England, and *sudor*, sweat.) The sweating sickness. *Sennertus*.

Ango'lam. A very tall tree of Malabar, possessing vermifuge powers.

Ango'ne. (From αγχω, to strangle.) A nervous sort of quinsy, or hysteric suffocation, where the fauces are contracted and stopped up without inflammation.

A'ngor. Intense bodily pain. *Galen*.

A'ngos. (Αγγος, a vessel.) A vessel; a collection of humours.

ANGUSTU'RÆ CORTEX. Angustura bark. See *Cusparia*.

Anhela'tio. (From *anhelo*, to breathe with difficulty.) *Anhelitus*. Shortness of breathing.

Anice′ton. (From α, priv. and νικη, victory.) A name of a plaister invented by Crito, and so called because it was thought an infallible or invincible remedy for achores, or scald-head. It was composed of litharge, alum, and turpentine, and is described by Galen.

A′NIMA. The thinking principle.

A′nima a′loës. Refined aloes.

A′nima articulo′rum. Hermodactylus.

A′nima he′patis. Sal martis.

A′nima pulmo′num. The soul of the lungs. A name given to saffron, on account of its use in asthmas.

A′nima rhaba′rbari. The best rhubarb.

A′nima satu′rni. A preparation of lead.

A′nima ve′neris. A preparation of copper.

ANIMAL. An organized body endowed with life and voluntary motion.

Animal actions. *Actiones animales.* Those actions, or functions, are so termed, which are performed through the means of the mind. To this class belong the external and internal senses, the voluntary action of muscles, voice, speech, watching, and sleep.

Animal heat. Heat is essentially necessary to life. That of a man in health is about 98 of Fahrenheit. It appears to depend upon the decomposition of the air in the lungs. See *Respiration*.

Animal oil. Oleum animale. An empyreumatic oil, obtained from the bones of animals, recommended as an anodyne and antispasmodic.

A′nime gu′mmi. The substance which bears this name in the shops is a resin, the produce of the *Hymenæa courbaril* of Linnæus. It is seldom ordered in the practice of the present day, and is only to be met with in the collections of the curious.

A′nimi deli′quium. (From *animus*, the mind, and *delinquo*, to leave.) Fainting. See *Syncope*.

A′nimus. This word is to be distinguished from *anima*; the former expresses the faculty of reasoning, and the latter the being in which that faculty resides.

Anin′ga. A root which grows in the Antilles islands, and is used by sugar-bakers for refining their sugar.

Anisca′lptor. (From *anus*, the breech, and *scalpo*, to scratch.) The latissimus dorsi is so called, because it is the muscle chiefly instrumental in performing this office. *Bartholin.*

Aniso′tachys. (From ανισος, unequal, and ταχυς, quick.) A quick and unequal pulse. *Gorræus.*

ANI′SUM. (From α, neg. and ισος, equal.) Anise. See *Pimpinella*.

Ani′sum sine′nse. } See *Illicium*
Anis′um stellatum. } *Anisatum*.

Ani′sum vulgare. See *Pimpinella*.

Annue′ntes. (From *annuo*, to nod.) Some muscles of the head were formerly so called, because they perform the office of nodding, or bending the head downwards. *Cowper, &c.*

Annular. (*Annularis.*) Like a ring; thus, annular bone, &c.

Annular bone. *Circulus osseus.* A ring-like bone placed before the cavity of the tympanum in the fœtus.

Annular cartilage. See *Cartilago Cricoidea.*

Annula′ris di′gitus. The ring-finger. The one between the little and middle fingers.

Annula′ris proce′ssus. See *Pons varolii.*

A′NNULUS ABDO′MINIS. The abdominal ring. An oblong tendinous opening in each groin, through which the spermatic chord in men, and the round ligament of the uterus in women, pass. It is through this aperture that the abdominal viscera fall in that species of hernia, which is called bubonocele. See *Obliquus externus abdominis.*

A′no. (Ανω, upwards; in opposition to κατω, downwards.) Upwards.

Anocatha′rtica. (From ανω, upwards, and καθαιρω, to purge.) Emetics: medicines which purge upwards.

Anochei′lon. (From ανω, upwards, and χειλος, the lip.) The upper lip.

Ano′dia. (From α, neg. and οδος, the way.) Hippocrates uses this word for inaccuracy and irregularity in the description and treatment of a disease.

Ano′dyna. See *Anodynes.*

ANODYNES. (*Anodyna*, sc. *medicamenta.* From α, priv. and ωδυνη, pain.) Those medicines are so termed which ease pain and procure sleep. They are divided into three sorts; paregorics, or such as assuage pain; hypnotics, or such as relieve by procuring sleep; and narcotics, or such as ease the patient by stupifying him.

Ano′dynum minera′le. Sal prunella.

Ano′dynum martia′le. Ferrum ammoniatum precipitated from water by potash.

Anomalous. This term is often applied to those diseases whose symptoms do not appear with that regularity which is generally observed in diseases. A disease is also said to be anomalous, when the symptoms are so varied as not to bring it under the description of any known affection.

Ano′mphalos. (From α, priv. and ομφαλος, the navel.) *Anomphalus.* Without a navel.

Ano′nymus. (From α, priv. and ονομα, name.) Nameless; it was formerly applied to the cricoid muscle.

Ano′rchides. (From α, priv. and ορχις, the testicle.) Children are so termed which come into the world without testicles. This is a very common occurrence. The testicles of many male infants at the time of birth are within the abdomen. The time of their descent is very uncertain, and instances have occurred where they have not reached the scrotum at the age of ten or fifteen.

ANORE′XIA. (From *α*, priv. and *ορεξις*, appetite.) A want of appetite, without loathing of food. Cullen ranks this genus of disease in the class *locales*, and order *dysorexiæ*; he believes it to be generally symptomatic, but enumerates two species, viz. the *anorexia humoralis*, and the *anorexia atonica*. See *Dyspepsia*.

ANO′SMIA. (From *α*, neg. and *οζω*, to smell.) A loss of the sense of smelling. This genus of disease is arranged by Cullen in the order *locales*, and order *dysæthesiæ*. When it arises from a disease of the Schneiderian membrane, it is termed *anosmia organica*; and when from no manifest cause, *anosmia atonica*.

A′NSER DOME′STICUS. The tame goose. The flesh of this bird is somewhat similar to that of the duck, and requires the assistance of spirituous and stimulating substances, to enable the stomach to digest it. Both are very improper for weak stomachs.

ANSERI′NA. (From *anser*, a goose; so called, because geese eat it.) See *Potentilla*.

ANTACIDS. (*Antacida*, sc. *medicamenta*. From *αντι*, against, and *acidus*, acid.) Remedies which obviate acidity in the stomach. Their action is purely chemical, as they merely combine with the acid present, and neutralize it. They are only palliatives, the generation of acidity being to be prevented by restoring the tone of the stomach and its vessels. Dyspepsia and diarrhœa are the diseases in which they are employed. The principal antacids in use are the alkalies; e. g. Liquoris potassæ, gutt. xv. or from 5 to 15 gr. of subcarbonate of potash, or soda dissolved in water. The solution of soda, called double soda-water, or that of potash supersaturated with carbonic acid, is more frequently used, as being more pleasant. Ammonia has been recommended as preferable to every other antacid, from 10 to 20 drops of the liquor ammoniæ in a cupful of water. The liquor calcis, or lime water, is likewise used to correct acidity, two or three ounces being taken occasionally. Creta præparata alone, or with the addition of a small quantity of any aromatic — chelæ cancrorum præparatæ; magnesia also and its carbonate, are used for the same purpose.

Antagonist muscles. Counteracting muscles, or those muscles which have opposite functions. Such are the flexor and extensor of any limb, the one of which contracts it, the other stretches it out; and also the abductors and adductors. Solitary muscles are those without any antagonist, as the heart, &c.

Anta′lgica. (From *αντι*, against, and *αλγος*, pain.) Anodynes. Remedies which relieve pain.

Anta′lkalines. (From *αντι*, against, and *alkali*, an alkali.) Medicines which possess the power of neutralizing alkalis. All the acids are of this class.

Antaphrodisi′aca. (From *αντι*, against, and *Αφροδιτη*, Venus.) Anti-venereals, or medicines which extinguish amorous desires. *Wedel. Amen. Med.*

Antaphrodi′tica. The same.

Antapo′dosis. (From *ανταποδιδωμι*, to reciprocate.) A vicissitude, or return of the paroxysm of fevers. *Hippocrates.* Called by Galen *epidosis*.

Antaris. Mercury.

Antarthri′tica. (From *αντι*, against, and *αρθριτις*, the gout.) Medicines which relieve or repel the gout.

Antasthma′tica. (From *αντι*, against, and *ασθμα*, an asthma.) Remedies against asthma.

Antatro′phica. (From *αντι*, against, and *ατροφια*, a consumption.) Medicines which relieve consumption.

Anteche′sis. (From *ἀντεχομαι*, to resist.) A violent stoppage in the bowels, which resists all efforts to remove it. *Hippocrates.*

Antela′bium. (From *ante*, before, and *labium*, a lip.) The extremity of the lip.

Ante′mbasis. (From *αντι*, mutually, and *εμβαινω*, to enter.) A coalescence, or union of bone. *Galen.*

Anteme′tica. (From *αντι*, against, and *εμεω*, to vomit.) Medicines which stop or prevent vomiting.

Antenea′smus. (From *αντι*, against, and *τεινεσμος*, implacable.) That species of madness in which the patient endeavours to destroy himself.

Antephia′ltica. (From *αντι*, against, and *εφιαλτης*, the night-mare.) Medicines which prevent the night-mare.

Antepile′ptica. (From *αντι*, against, and *επιληψις*, the epilepsy.) Remedies against the epilepsy, and other convulsive disorders.

ANTE′RIOR AU′RIS. One of the common muscles of the ear, situated before the external ear. It arises thin and membranous, near the posterior part of the *zygoma*, and is inserted into a small eminence on the back of the helix, opposite to the concha, which it draws a little forwards and upwards.

ANTERIOR INTERCOSTAL NERVE. *Splanchnic nerve.* A branch of the great intercostal that is given off in the thorax.

Ante′rior ma′llei. See *Laxator tympani*.

Anthe′lix. See *Antihelix*.

Anthe′lmia. (From *αντι*, against, and *ελμινς*, a worm.) The herb Indian pink, or worm-grass, so called, because it was thought of great virtue in expelling worms. See *Spigelia Marilandica*.

ANTHELMINTICS. (*Anthelmintica*, sc. *medicamenta*; from αντι, against, and ελμινς, a worm.) Medicines which procure the evacuation of worms from the stomach and intestines. The greater number of them act mechanically, dislodging the worms, by the sharpness or roughness of their particles, or by their cathartic operation. Some seem to have no other qualities than those of powerful bitters, by which they either prove noxious to these animals, or remove that debility of the digestive organs, by which the food is not properly assimilated, or the secreted fluids poured into the intestines are not properly prepared; circumstances from which it has been supposed the generation of worms may arise. The principal medicines belonging to this class, are: Calomel, gamboge, Geoffræa inermis, tanacetum, polypodium filix mas, spigelia Marilandica, artemisia santonica, olea Europæa, stannum pulverisatum, ferri limaturæ, and dolichos pruriens: which see under their respective heads.

A′NTHEMIS. (*Anthemis, midis*; fœm. From ανθεω, *floreo*; because it bears an abundance of flowers.) Chamomile.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*.

2. The name in the last London Pharmacopœia for chamomile. See *Anthemis nobilis*.

A′NTHEMIS CO′TULA. (*Cotula*, a dim. of *cos*, a whetstone; so called from its leaves resembling a whetstone.) The systematic name for the plant called *Cotula fœtida* in the pharmacopœias. *Chamæmelum fœtidum*. Mayweed. Stinking camomile. This plant, *Anthemis cotula*, of Linnæus: — *receptaculis conicis paleis setaceis, seminibus nudis*, has a very disagreeable smell; the leaves, a strong, acrid, bitterish taste; the flowers, however, are almost insipid. It is said to have been useful in hysterical affections, but is very seldom employed.

A′NTHEMIS NO′BILIS. The systematic name for the *chamæmelum* of the shops. *Chamæmelum nobile*. *Chamomilla romana*. *Euanthemon* of Galen. *Anthemis* of the last London pharmacopœia. Common chamomile. *Anthemis foliis pinnato-compositis linearibus acutis subvillosis*, of Linnæus. Both the leaves and flowers of this indigenuous plant have a strong though not ungrateful smell, and a very bitter, nauseous taste: but the latter are the bitterer, and considerably more aromatic. They possess tonic and stomachic qualities, and are much employed to restore tone to the stomach and intestines, and as a pleasant and cheap bitter. They have been long successfully used for the cure of intermittents, as well as of fevers of the irregular nervous kind, accompanied with visceral obstructions. The flowers have been found useful in hysterical affections, flatulent or spasmodic colics, and dysentery; but, from their laxative quality, Dr. Cullen tells us they proved hurtful in diarrhœas. A simple infusion is frequently taken to excite vomiting, or for promoting the operation of emetics. Externally they are used in the *decoctum pro fomento*, and are an ingredient in the *decoctum malvæ compositum*.

A′NTHEMIS PYRE′THRUM. The plant from which we obtain the pyrethrum of the pharmacopæias. *Buphthalmum creticum*. *Bellis montana putescens acris*. *Dentaria*. *Herba salivaris*. *Pes alexandrinus*. Spanish Chamomile. Pellitory of Spain. *Anthemis caulibus simplicibus unifloris decumbentibus, foliis pinnato-multifidis*, of Linnæus. This root, though cultivated in this country, is generally imported from Spain. Its taste is hot and acrid, its acrimony residing in a resinous principle. The antient Romans, it is said, employed the root of this plant as a pickle. In its recent state, it is not so pungent as when dried, and yet, if applied to the skin, it produces inflammation. Its qualities are stimulant; but it is never used, except as a masticatory, for relieving toothaches, rheumatic affections of the face, and paralysis of the tongue, in which it affords relief by stimulating the excretory ducts of the salival glands.

ANTHERA. (From ανθος, a flower.)

1. A compound medicine used by the antients; so called from its florid colour. *Galen*. *Ægineta*.

2. The male part of the fructification of plants.

ANTHOPHY′LLI. (From ανθος, a flower, and φυλλον, a leaf; so called from the fragrance of the flowers and the beauty of the leaves.) Cloves are so termed when they have been suffered to grow to maturity. *G. Bauhin Pin.*

A′NTHORA. (*Quasi antithora*, αντιθορα: from αντι, against, and θορα, monkshood; so called because it is said to counteract the effects of the thora or monkshood.) A species of Wolfsbane. See *Aconitum*.

A′NTHOS FLO′RES. The flowers of the *rosmarinus* are so termed in some pharmacopœias.

ANTHRA′CIA. See *Anthrax*.

A′NTHRAX. (From ανθϱαξ, a burning coal.) *Anthracia*. *Anthrocosia*. *Anthrocoma*. *Carbunculus*. An hard and circumscribed inflammatory tubercle like a boil, which sometimes forms on the cheek, neck, or back, and in a few days becomes highly gangrenous. It then discharges an extremely fœtid sanies from under the black core, which, like a burning coal, continues destroying the surrounding parts. It is supposed to arise from a peculiar miasma, is most common in warm climates, and often attends the plague.

ANTHRACO′SIS O′CULI. A red, livid,

burning, sloughy, very painful tumour, occurring on the eyelids. *Ægineta.*

Anthropogra'phia. (From ανθρωπος, a man, and γραφω, to write.) Description of man's structure.

ANTHROPOLO'GIA. (From ανθρωπος, a man, and λογος, a discourse.) The description of man.

Anthypno'tica. (From αντι, against, and υπνος, sleep.) Medicines which prevent sleep or drowsiness.

Anthypochondri'aca. (From αντι, against, and ὑποχονδρια, the hypochondria.) Medicines adapted to cure low-spiritedness or disorders of the hypochondria.

Anthyste'rica. (From αντι, against, and υστερα, the womb.) Uterines or medicines which relieve the hysteric passion. *Blancard.*

A'NTI. (Αντι, against.) There are many names compounded with this word, as *antiasthmatics, antihysterics, antidysenterics,* &c. which signify medicines against the asthma, hysterics, dysentery, &c.

Anti'ades. (From αντιαω, to meet.) The tonsils are so called, because they answer one another. The mumps. *Nic. Piso.*

Antia'gra. (From αντιας, a tonsil, and αγρα, a prey.) *Antiagri.* A tumour of the tonsils. *Ulpian, Roland,* &c.

Antiarthri'tica. See *Antarthritica.*

Anticache'ctica. (From αντι, against, and καχεξια, a chachexy.) Medicines against a cachexy, or bad habit of body.

Antica'rdium. (From αντι, against, or opposite, and καρδια, the heart.) The hollow at the bottom of the breast, commonly called scrobiculus cordis, or pit of the stomach.

Anticatarrha'lia. (From αντι, against, and καταῤῥος, a catarrh.) Medicines which relieve a catarrh.

Anticauso'tica. (From αντι, against, and καυσος, a burning fever.) Remedies against burning fevers. We read, in Corp. Pharm. of Junken, of a *syrupus anticausoticus.*

A'nticheir. (From αντι, against, and χειρ, the hand.) The thumb. *Galen.*

Anticne'mion. (From αντι, against, or opposite, and κνημη, the calf of the leg.) That part of the tibia which is bare of flesh, and opposite the calf of the leg. The shin-bone. *Galen.*

Antico'lica. (From αντι, against, and κωλικη, the colic.) Remedies against the colic.

Antidia'stole. (From αντι, against, and διαστελλω, to distinguish.) An exact and accurate distinction of one disease, or symptom, from another.

Antidi'nica. (From αντι, against, and δινος, circumgyration.) Medicines against a vertigo, or giddiness. *Blancard.*

Antidota'rium. (From αντιδοτος, an antidote.) A term used by former writers, for what we now call a dispensatory; a place where antidotes are prescribed and prepared. There are antidotaries extant of several authors, as those of *Nicholaus, Mesue, Myrepsus,* &c

ANTI'DOTUS. (From αντι, against, and διδωμι, to give.) A preservative against sickness. A remedy. *Galen.*

Antidysente'rica. (From αντι, against, and δυσεντερια, a flux.) Medicines against a dysentery, or flux.

Antifebri'lia. (From αντι, against, and *febris,* a fever.) A febrifuge, a remedy against fever.

Antihe'ctica. (From αντι, against, and εκτικος, a hectic fever.) Remedies against a hectic fever.

Antihe'cticum Pote'rii. *Antimonium diaphoreticum Joviale.* A medicine invented by Poterius, formerly extolled as effectual in hectic fevers, but now disregarded. It is an oxyd of tin and chalybeated regulus of antimony, in consequence of their deflagration with nitre.

ANTIHE'LIX. (From αντι, against, and ελιξ, the helix.) The inner circle of the auricle, so called from its opposition to the outer circuit called the helix.

Antihelmin'tica. See *Anthelmintics.*

Antihyster'ica. (From αντι, against, and ὑστερικα, hysterics.) Medicines which prevent or relieve hysterics.

Antile'psis. (From αντιλαμβανω, to take hold off.) The securing of bandages, or ligatures from slipping. *Hippocrates.*

Antilo'bium. (From αντι, opposite, and λοβος, the bottom of the ear.) The tragus, or that part of the ear which is opposite the lobe.

Antiloi'mica. (From αντι, against, and λοιμος, the plague.) Remedies or preventives against the plague.

Anti'lopus. The antelope. An African beast resembling a deer, whose hoofs and horns were formerly given in hysteric and epileptic cases.

Antily'ssus. (From αντι, against, and λυσσα, the bite of a mad dog.) A medicine or remedy against the bite of a mad dog.

Antimonial powder. See *Antimonialis pulvis.*

Antimonia'le. (From *antimonium.*) An antimonial, or composition in which antimony is a chief ingredient. A preparation of antimony.

Antimonia'lis pu'lvis. Antimonial powder. "Take of sulphuret of antimony, powdered, a pound; hartshorn shavings, two pounds." Mix and throw them into a broad iron pot heated to a white heat, and stir the mixture constantly until it acquires an ash colour. Having taken it out, reduce it to powder, and put it into a coated crucible, upon which another inverted crucible, having a small hole in its bottom, is to be luted. Then raise the fire by degrees to a white heat, and keep it so for two hours. Reduce the residuary mass to a very fine powder. The dose is from five to ten grains. It is in high esteem as a febrifuge, sudorific, and antispasmodic. The diseases in which it is mostly exhibited are, most species of asthenic and exanthematous fevers, acute rheumatism, gout, diseases arising from obstructed perspiration, dysuria, nervous affections, and spasms.

This preparation was introduced into the former London Pharmacopœia as a substitute for a medicine of extensive celebrity, Dr. James's powder; to which, however, the present form more nearly assimilates in its dose, and it is more manageable in its administration, by the reduction of the proportion of antimony to one half.

Antimo′nii O′xydum. *Oxyd of Antimony.* This preparation is now directed to be made by dissolving an ounce of tartarized antimony, and two drams of subcarbonate of ammonia, separately in distilled water, mixing the solutions and boiling, till the oxyd of antimony is precipitated, which is to be washed with water, and dried. This must not be confounded with the old calcined or diaphoretic antimony, being a much more active preparation. See *Antimony.*

In its effects, it will be found to agree pretty much with the antimonium tartarisatum; but it is very little employed.

Antimo′nii tartarizati liquor. Solution of tartarized antimony. *Vinum antimonii tartarizati* of the Pharm. Lond. 1787. "Take of tartarized antimony, one scruple; boiling distilled water, four fluid ounces; wine, six fluid ounces." Dissolve the tartarized antimony in the boiling distilled water, then add the wine. Half an ounce of the solution contains one grain of the salt. This preparation may be given in all cases where the tartar emetic is indicated.

Antimo′nii sulphure′tum præcipita′tum. *Sulphur antimonii præcipitatum.* Precipitated sulphuret of antimony. This preparation of antimony appears to have rendered that called Kermes mineral unnecessary. It is made thus:—

Take of sulphuret of antimony, in powder, two pounds; — of the solution of potash, four pints: — of distilled water, three pints.

Mix and boil the mixture over a slow fire for three hours stirring it well, and occasionally adding distilled water, so that the same measure may be preserved. Strain the solution forthwith through a double linen cloth; and while it is yet hot, drop in, gradually, as much sulphuric acid as may be required to precipitate the powder; then wash away the sulphate of potash, by hot water; dry the precipitated sulphuret of antimony, and reduce it to powder. In this process part of the water is decomposed, and its oxygen unites partly with the antimony; the oxyd of antimony as well as the potash combine with sulphur and hydrogen, forming hydrosulphuret of antimony and hydroguretted sulphuret of potash: if the solution be allowed to cool, the former of these partly precipitates, constituting the kermes mineral; but the addition of the sulphuric acid throws down the whole of it at once, mixed with some sulphur, furnished by the decomposition of the hydroguretted sulphuret of potash.

As an alterative and sudorific, it is in high estimation, and given in diseases of the skin and glands; and joined with calomel, it is one of the most powerful and penetrating alteratives we are in possession of.

ANTIMO′NIUM. See *Antimony.*

Antimo′nium calcina′tum. The volatile oxyd of antimony.

Antimo′nium diaphore′ticum. An old name for the volatile oxyd of antimony.

Antimo′nium tartariza′tum. *Tartarus emeticus. Tartarum emeticum. Tartarus antimonialis. Tartris antimonii cum potassâ. Tartarum stibiatum.* Tartar emetic is obtained by boiling the fusible oxyd of antimony with supertartrate of potash; the excess of tartaric acid dissolves the oxyd, and a triple salt is obtained by crystallization. The London Pharmacopœia directs thus:

Take of powdered sulphuret of antimony two ounces, nitrate of potash an ounce, supertartrate of potash two ounces, sulphuric acid two ounces by weight, distilled water a pint and a half; mix the acid with half a pint of the water in a suitable glass vessel, and heat them in a sand bath. When they are moderately heated, add gradually the nitre and sulphuret previously mixed; then boil, till the moisture is consumed. Wash the residuum with distilled water, till it is without flavour, and mix it, still moist with the supertartrate of potash, and throw them into a pint of distilled water: finally boil the liquor away sufficiently, and set it aside to crystallize. In the first part of this process, when nitre and sulphuret of antimony are boiled in dilute sulphuric acid, this gradually decomposes the nitre, and the nitric acid, as it is liberated oxidizes the antimony; the oxide of antimony, united probably to a small portion of sulphuric acid, appears in the form of a white powder: and it is by boiling this with the supertartrate of potash, which renders the oxide of antimony soluble, that the antimonium tartarizatum, or tartrate of antimony and potash, is formed. A solution of this salt in dilute wine is ordered in the pharmacopæia. See *Antimonii Tartarizati Liquor.*

Tartar emetic is the most useful of all the antimonial preparations. Its action is not dependent on the state of the stomach, and, being soluble in water, its dose is easily managed, while it also operates more speedily.

In doses of from one to three, four, or five grains, it generally acts powerfully as an emetic, and is employed whenever we wish to obtain the effects which result from full vomiting. As patients are differently affected by this medicine, the safest mode of exhibiting it is: ℞. *Antimonii tartarizati,* gr. iii. *Aquæ distillatæ,* ℥iv. Misce et cola.

Dosis ℥ss. omni horæ quadrante, donec supervenerit vomitus.

For children, emetic tartar is not so safe an emetic as ipecacuanha powder: when great debility of the system is present, even a small dose has been known to prove fatal to children. Sometimes it proves cathartic.

In smaller doses it excites nausea, and proves a powerful diaphoretic and expectorant. As an emetic it is chiefly given in the beginning of fevers and febrile diseases; when great debility is present, and in the advanced stages of typhoid fever its use is improper and even sometimes fatal. As a diaphoretic, it is given in small doses, of from an eighth to a quarter of a grain; and as an expectorant, in doses still smaller. Emetic tartar in small doses, combined with calomel, has been found a powerful yet safe alterative in obstinate eruptions of the skin. ℞. *Antimonii tartarizati*, gr. iv. *Hydrargyri submuriatis*, gr. xvi. *Confectionis Rosæ gallicæ*, q. s. Divide in pil. xxiv. Capiat i. mane nocteque ex thea sassafras.

In the form of powder, or dissolved in water, it is applied by a pencil to warts and obstinate ulcers: it is also given in the form of clyster, with a view to produce irritation in soporose diseases, apoplexy, ileus, and hernia incarcerata. The powder mixed with any fluid, and rubbed on the scrobiculus cordis, excites vomiting. Another property which tartar emetic has, when rubbed on the skin, is that of producing a crop of pustules very like to the small-pox, and with this view it is used against rheumatic pains, white, and other obstinate swellings. The best antidote against the bad effects of too large a quantity of this and other antimonial preparations, is a decoction of the bark of cinchona: in defect of which, tea and other astringents may be used.

Antimo'nium vitrifactum. Glass of antimony. An oxid of antimony, with a little sulphuret.

ANTIMONY. (*Antimonium*, i. n. Αντιμονιον. The origin of this word is very obscure. The most received etymology is, from αντι, against, and μονος, a monk; because Valentine, by an injudicious administration of it, poisoned his brother monks.) *Antimonium Stibium.* A metal found *native*, but very rarely; it has, in that state, a metallic lustre, and is found in masses of different shapes; its colour is white, between those of tin and silver. It generally contains a small portion of arsenic. It is likewise met with in the state of an oxyd, *antimonial ochre*. The most abundant ore of it is that in which it is combined with sulphur, *the grey ore of antimony*, or *sulphuret of antimony*. The colour of this ore is blueish, or steel-grey, of a metallic lustre, and often extremely beautifully variegated. Its texture is either compact, foliated, or striated. The striated is found both crystallized, massive, and disseminated: there are many varieties of this ore.

Properties of Antimony. — Antimony is a metal of a greyish white, having a slight blueish shade, and very brilliant. Its texture is lamellated, and exhibits plates crossing each other in every direction. Its surface is covered with herbarizations and foliage. Its specific gravity is, 6.702. It is sufficiently hard to scratch all the soft metals. It is very brittle, easily broken, and pulverizable. It fuses at 810° Fahr. It can be volatilized, and burns by a strong heat. When perfectly fused, and suffered to cool gradually, it crystallizes in octahedra. It unites with sulphur and phosporus. It decomposes water strongly at a red heat. It is soluble in alkaline sulphurets. Sulphuric acid, boiled upon antimony, is feebly decomposed. Nitric acid dissolves it in the cold. Muriatic acid scarcely acts upon it. The oxigenated muriatic acid gas inflames it, and the liquid acid dissolves it with facility. Arsenic acid dissolves it by heat with difficulty. It unites, by fusion, with gold, and renders it pale and brittle. Platina, silver, lead, bismuth, nickel, copper, arsenic, iron, cobalt, tin, and zinc, unite with antimony by fusion, and form with it compounds, more or less brittle. Mercury does not alloy with it easily unless very pure. We are little acquainted with the action of alkalies upon it. Nitrate of potash is decomposed by it. It fulminates by percussion with oxigenated muriate of potash. Antimony forms at least two definite compounds with oxygen One may be obtained by the action of muriatic acid, adding water to the solution, which precipitates the oxide in union with a little acid, which may be separated by boiling for some time in a solution of subcarbonate of potash; it is of a dull brownish white colour, fusible at a moderate red heat, but hardly volatilized without access of air, which carries the oxidizement farther. The other oxide is formed by the combustion of the metal, subliming as a fine white powder, which requires a much higher temperature for its fusion than the preceding. It is very important to distinguish these two compounds; the former, or fusible oxide, combines most readily with acids, and possesses much greater activity as a medicine, than the volatile oxide; indeed it appears to be the basis of all those antimonial preparations, on which any reliance can be placed.

Methods of obtaining antimony. — 1. To obtain antimony, heat 32 parts of filings of iron to redness, and project on them, by degrees, 100 parts of antimony; when the whole is in fusion, throw on it, by degrees, 20 parts of nitrate of potash, and after a few minutes quiet fusion, pour it into an iron melting cone, previously heated and greased.

2. It may also be obtained by melting eight parts of the ore mixed with six of nitrate of potash, and three of supertartrate of potash, gradually projected into a red-hot crucible, and fused.

To obtain perfectly pure antimony, Margraaf melted some pounds of the sulphuret in a luted crucible, and thus scorified any metals it might contain. Of the antimony thus purified, which lay at the bottom, he took sixteen ounces, which he oxidized cautiously, first with a slow, and afterwards with a strong heat, until it ceased to smell of sulphur, and acquired a greyish-white colour. Of this grey powder he took four ounces, mixed them with six drachms of supertartrate of potash, and three of charcoal, and kept them in fusion in a well covered and luted crucible, for one hour, and thus obtained a metallic button that weighed one ounce, seven drachms, and twenty grains.

The metal, thus obtained, he mixed with half its weight of desiccated subcarbonate of soda, and covered the mixture with the same quantity of the subcarbonate. He then melted it in a well covered and luted crucible, in a very strong heat, for half an hour, and thus obtained a button which weighed one ounce, six drachms, and seven grains, much whiter and more beautiful than the former. This he again treated with one and a half ounce of subcarbonate of soda, and obtained a button, weighing one ounce, five drachms, and six grains. This button was still purer than the foregoing. Repeating these fusions with equal weights of subcarbonate of soda three times more, and an hour and a half each time, he at last obtained a button so pure as to amalgamate with mercury with ease, very hard, and in some degree malleable; the scoriæ formed in the last fusion were transparent, which indicated that they contained no sulphur, and hence it is the obstinate adherence of the sulphur that renders the purification of this metal so difficult.

The preparations of antimony formerly in use were very many: those now directed to be kept are: —

1. Sulphuretum antimonii.
2. Oxydum antimonii.
3. Sulphuretum antimonii præcipitatum.
4. Antimonium tartarizatum.
5. Pulvis antimonialis.
6. Liquor antimonii tartarizati.

Anti′moris. (From αντι, against, and μορος, death, or disease.) A medicine to prolong life.

Antinephri′tica. (From αντι, against, and νεφριτις, a disease of the kidneys.) Remedies against disorders of the kidneys. *Blancard.*

Antiodonta′lgicus. An insect described by Germi in a small work published at Florence 1794, so called from its property of allaying the tooth-ache. It is a kind of curculio found on a species of thistle, carduus spinosissimus. If twelve or fifteen of these insects in the state of larvæ, or when come to perfection, be bruised and rubbed slowly between the fore-finger and thumb until they have lost their moisture; and if the painful tooth where it is hollow, be touched with that finger, the pain ceases sometimes instantaneously. A piece of shamoy leather will answer the same purpose with the finger. If the gums are inflamed, the remedy is of no avail. Other insects possess the property of curing the tooth-ache; such as the scarabeus ferrugineus of Fabricius; the coccinella septempunctata, or lady-bird; the chrysomela populi, and the chrysomela sanguinolenta. This property belongs to several kinds of the coleoptera.

Antiparaly′tica. (From αντι, against, and παραλυσις, the palsy.) Medicines against the palsy.

Antipathei′a. (From αντι, against, and παθος, an affection.) Antipathy. An aversion to particular objects.

Antiperista′ltic. (From αντι, against, and περιστελλω, to contract.) Whatsoever obstructs the peristaltic motion of the intestines.

Antiperi′stasis. (From αντι, against, and περιστημι, to press.) A compression on all sides. *Theophrastus de igne.*

Antipha′rmaca. (From αντι, against, and φαρμακον, a poison.) The same as alexipharmaca. Remedies or preservatives against poison. *Dioscorides.*

ANTIPHLOGI′STICA. (From αντι, against, and φλεγω, to burn.) Antiphlogistics. A term applied to those medicines, plans of diet, and other circumstances, which tend to oppose inflammation, or which, in other words, weaken the system by diminishing the activity of the vital power.

Antiphthi′sica. (From αντι, against, and φθισις, consumption.) Remedies against a consumption.

Anti′phthora. (From αντι, against, and φθορα, corruption.) A species of wolfsbane which resists corruption.

Antiphy′sica. (From αντι, against, and φυσαω, to blow.) Carminatives or remedies against wind.

Antipleuri′tica. (From αντι, against, and πλευριτις, pleurisy.) Remedies against a pleurisy.

Antipoda′grica. (From αντι, against, and ποδαγρα, the gout.) Medicines which relieve or remove the gout.

Antipra′xia. (From αντι, against, and πρασσω, to work.) A contrariety of functions and temperaments in divers parts. Contrariety of symptoms.

Antipyre′tica. (From αντι, against, and πυρετος, fever.) *Antifebrile.* Remedies against a fever.

Antiquartana′ria. (From αντι, against, and *quartana*, a quartan fever.) Remedies against quartan agues.

Antiqua'rticum. The same as Antiquartanaria.

ANTIRRHI'NUM. (Αντιῤῥινον: from αντι, against, and ῥις, the nose; so called because it represents the nose of a calf.) Snap-dragon, or calf's-snout. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Angiospermia*.

Antirrhi'num lina'ria. The systematic name for the *linaria* of the pharmacopœias. *Osyris. Urinaria.* Common toad-flax. *Antirrhinum foliis lanceolatis linearibus confertis, caule erecto, spicis terminalibus sessilibus, floribus imbricatis*, of Linnæus. A perennial indigenous plant, common in barren pastures, hedges, and the sides of roads, flowering from July to September. The leaves have a bitterish and somewhat saline taste, and when rubbed between the fingers, have a faint smell, resembling that of elder. They are said to be diuretic and cathartic, and in both characters to act powerfully, especially in the first; hence the name *urinalis*. They have been recommended in dropsies and other disorders requiring powerful evacuations. The linaria has also been used as a resolvent in jaundice, and such diseases as were supposed to arise from visceral obstructions. But the plant has been chiefly valued for its effects when externally applied, especially in hæmorrhoidal affections, for which both the leaves and flowers have been employed in various forms of ointment, fomentation, and poultice. Dr. Wolph first invented an ointment of this plant for the piles. The Landgrave of Hesse, to whom he was physician, constantly interrogated him, to discover its composition; but Wolph obstinately refused, till the prince promised to give him a fat ox annually for the discovery: hence, to the following verse, which was made to distinguish the linaria from the escula, viz.

"*Esula lactescit, sine lacte linaria crescit,*"

The hereditary Marshal of Hesse, added,

"*Esula nil nobis, sed dat linaria taurum.*"

Antirrhi'num elatine. The systematic name of the plant we call fluellen, or female speedwell. *Elatine* of the shops. The leaves of this plant have a roughish bitter taste, but no smell. It was formerly much used against scurvy and old ulcerations, but now wholly forgotten.

Antisco'lica. (From αντι, against, and σκωληξ, a worm.) Remedies against worms. Anthelmintics.

ANTISCORBU'TICS. (*Antiscorbutica*, sc. *medicamenta*; from αντι, against, and *scorbutus*, the scurvy.) Medicines which cure the scurvy.

ANTISEPTICS. (*Antiseptica*, sc. *medicamenta*; from αντι, against, and σηπω, to putrefy.) Those medicines which possess a power of preventing animal substances from passing into a state of putrefaction, and of obviating putrefaction when already begun. This class of medicines comprehends four orders.

1. *Tonic antiseptics*, as cinchona, *cuspariæ cortex*, chamæmelum, &c. which are suited for every condition of body, and are, in general, preferable to other antiseptics, for those with relaxed habits.

2. *Refrigerating antiseptics*, as acids, which are principally adapted for the young, vigorous, and plethoric.

3. *Stimulating antiseptics*, as wine and alkohol, best adapted for the old and debilitated.

4. *Antispasmodic antiseptics*, as camphora and asafœtida, which are to be selected for irritable and hysterical habits.

Anti'spasis. (From αντι, against, and σπαω, to draw.) A revulsion. The turning the course of the humours, whilst they are actually in motion. *Galen*.

ANTISPASMODICS. (*Antispasmodica*, sc. *medicamenta*; from αντι, against, and σπασμος, a spasm.) Medicines which possess the power of allaying, or removing, inordinate motions in the system, particularly those involuntary contractions which take place in muscles, naturally subject to the command of the will. Spasm may arise from various causes. One of the most frequent is a strong irritation, continually applied; such as dentition, or worms. In these cases, narcotics prove useful, by diminishing irritability and sensibility. Sometimes spasm arises from mere debility; and the obvious means of removing this is by the use of tonics. Both narcotics and tonics, therefore, are occasionally useful as antispasmodics, such as opium, camphor, and ether, in the one class, and zinc, mercury, and Peruvian bark, in the other. But there are farther, several other substances, which cannot be with propriety referred to either of these classes; and to these, the title of antispasmodics is more exclusively appropriated. The principal antispasmodics, properly so called, are moschus, castoreum, oleum animale empyreumaticum, petroleum, ammonia, asafœtida, sagapenum, galbanum, valeriana, crocus, melaleuca leucadendron.

The narcotics, used as antispasmodics, are ether, opium, camphor.

Tonics, used as antispasmodics, are cuprum, zincum, hydrargyrum, cinchona.

Anti'thenar. (From αντι, against, and θεναρ, the palm of the hand.) A muscle of the foot. See *Adductor pollicis pedis*.

Antitra'gicus. *Antitragus*. (*Antitragicus*, sc. *musculus*.) One of the proper muscles of the ear, whose use is to turn up the tip of the antitragus a little outwards, and to depress the extremity of the antihelix towards it.

Antitra'gus. (*Antitragus*, i, m. from

αντι, and τραγος, the tragus.) An eminence of the outer ear, opposite to the tragus.

Antivene'rea. (From αντι, against, and *venereus*, venereal.) Medicines against the lues venerea.

Anto'nii Sa'ncti i'gnis. (So called because St. Anthony was supposed to cure it miraculously. In the Roman Missal, St. Anthony is implored as being the preserver from all sorts of fire.) St. Anthony's fire. See *Erysipelas*.

Antophy'llon. (From αντι, against, and φυλλον, a leaf; so called because its leaves are opposite.) The male caryophyllus.

A'NTRUM OF HIGHMORE. (From the name of an anatomist, who gave the first accurate description of it.) *Antrum Highmorianum*. *Antrum genæ*. *Sinus maxillaris pituitarius*. *Antrum maxillæ superioris*. Maxillary sinus. A large cavity in the middle of each superior maxillary bone, between the eye and the roof of the mouth, lined by the mucous membrane of the nose.

One or both antra are liable to several morbid affections. Sometimes their membranous lining inflames, and secretes pus. At other times, in consequence of inflammation, or other causes, various excrescences and fungi are produced in them. Their bony parietes are occasionally affected with exostosis, or caries. Extraneous bodies may be lodged in them, and it is even asserted that insects may be generated in them, and cause, for many years, afflicting pains. Abscesses in the antrum are by far the most common. Violent blows on the cheek, inflammatory affections of the adjacent parts, and especially of the pituitary membrane lining the nostrils, exposure to cold and damp, and, above all things, bad teeth, may induce inflammation and suppuration in the antrum. The first symptom is a pain, at first imagined to be a tooth-ache, particularly if there should be a carious tooth at this part of the jaw. This pain, however, extends more into the nose than that usually does which arises from a decayed tooth; it also affects, more or less, the eye, the orbit, and the situation of the frontal sinuses. But even such symptoms are insufficient to characterise the disease, the nature of which is not unequivocally evinced, till a much later period. The complaint is, in general, of much longer duration than one entirely dependent on a caries of the tooth, and its violence increases more and more, until at last a hard tumour becomes perceptible below the cheek-bone. The swelling by degrees extends over the whole cheek; but it afterwards rises to a point, and forms a very circumscribed hardness, which may be felt above the back-grinders. This symptom is accompanied by redness, and sometimes by inflammation and suppuration of the external parts. It is not uncommon also, for the outward abscess to communicate with that within the antrum. The circumscribed elevation of the tumour, however, does not occur in all cases. There are instances in which the matter makes its way towards the palate, causing the bones of the part to swell, and at length rendering them carious, unless timely assistance be given. There are other cases, in which the matter escapes between the fangs and sockets of the teeth. Lastly, there are other examples, in which matter, formed in the antrum, makes its exit at the nostril of the same side, when the patient is lying with his head on the opposite one, in a low position. If this mode of evacuation should be frequently repeated, it prevents the tumour both from pointing externally, and bursting, as it would do if the purulent matter could find no other vent. This evacuation of the pus from the nostril is not very common. The method of cure consists in extracting one of the dentes molares from the affected side; and then perforating through the socket into the bony cavity. A mild injection may afterwards be employed to cleanse the sinus occasionally. [Cyclopædia.]

A'ntrum buccino'sum. The cochlea of the ear.

A'ntrum pylo'ri. The great concavity of the stomach approaching the pylorus.

A'ntrum maxilla're. See *Antrum of Highmore*.

Ants, acid of. See *Formic acid*.

Anty'lion. (From *Antyllus*, its inventor.) An astringent application, recommended by Paulus Ægineta.

A'NUS. (*Anus*, *i*, masc. *quasi onus*; as carrying the burden of the bowels.)

1. The fundament; the lower extremity of the great intestine, named the rectum, is so called; and its office is to form an outlet for the fæces. The anus is furnished with muscles which are peculiar to it, viz. the *sphincter*, which forms a broad circular band of fibres, and keeps it habitually closed, and the *levatores ani*, which serve to dilate and draw it up to its natural situation, after the expulsion of the fæces. It is also surrounded, as well as the whole of the neighbouring intestine, with muscular fibres, and a very loose sort of cellular substance. The anus is subject to various diseases, especially piles, ulceration, abscesses, excrescences, prolapsus; and imperforation in new-born infants.

2. The term *anus* is also applied to a small opening of the third ventricle of the brain, which leads into the fourth.

Anus, artificial. An accidental opening in the parietes of the abdomen, to which opening some part of the intestinal canal leads, and through which the fæces are either wholly or in part discharged. When a strangulated hernia occurs, in which the intestine is simply pinched, and this event is unknown; when it has not been relieved b the usual means; or when the necessary operation has not been practised in time;

the protruded part becomes gangrenous, and the fæces escape. But if the patient should be at last operated upon, his fæces are discharged through the wound, and the intestines are more easily emptied. In both cases, the excrement continues to be discharged from the artificial opening. In this way an artificial anus is formed, through which the excrement is evacuated during life.

Any′drion. (From α, priv. and υδωρ, water; so called, because they who eat of it become thirsty.) A species of nightshade, according to Blancard.

Anypeu′thynus. (From α, neg. and υπευθυνος, blamable.) Hippocrates, in his Precepts, uses this word to signify an accidental event, which cannot be charged on the physician, and for which he is not accountable.

AO′RTA. (From αηρ, air, and τηρεω, to keep; so called because the antients supposed that only air was contained in it.) The great artery of the body, which arises from the left ventricle of the heart, forms a curvature in the chest, and descends into the abdomen. See *Artery*.

Apalachi′ne ga′llis. (From απαλακω, to repel; because it is supposed to repel infection.) See *Ilex Cassine.*

Apari′ne. (From ρινη, a file; because its bark is rough, and rasps like a file.) Goose-grass. See *Galium Aparine.*

Aparthro′sis. (From απο and αρθρον, a joint.) Articulation.

Ape′lla. (From α, priv. and *pellis*, skin.) Shortness of the prepuce. Galen gives this name to all whose prepuce, either through disease, section, or otherwise, will not cover the glans.

Ape′psia. (*Apepsia, æ*, f. απεψια: from α, priv. and πεπτω, to digest.) Indigestion. See *Dyspepsia.*

Ape′riens palpebra′rum re′ctus. See *Levator palpebræ superioris.*

APERIENTS. (*Aperientia*, sc. *medicamenta;* from *aperio*, to open.) Laxatives. Medicines which gently open the bowels.

Aperi′status. (From α, neg. and περιστημι, to surround.) *Aperistaton.* An epithet used by Galen, of an ulcer which is not dangerous, nor surrounded by inflammation.

Aperi′staton. See *Aperistatus.*

Ape′rtor o′culi. See *Levator palpebræ superioris.*

Apeuthy′smenus. (From απο and ευθυς, straight.) A name formerly given to the intestinum rectum, or straight gut.

A′PEX. The extremity of a part; as the apex of the tongue, apex of the nose, &c.

Aphani′smus. (From αφανιζω, to remove from the sight.) The removal, or gradual decay, of a disorder.

Aphæ′resis. (From αφαιρεω, to remove.) This term was formerly much used in the schools of surgery, to signify that part of the art which consists in taking off any diseased or preternatural part of the body.

Aphepse′ma. (From απο, and εψω, to boil.) A decoction.

A′phesis. (From αφιημι, to remit.) The remission or termination of a disorder.

Aphiste′sis. (From αφιστημι, to draw from.) An abscess.

A′phodos. (From απο, and οδος, departure.) Excrement. The dejection of the body.

APHO′NIA. (Αφωνια: from α, priv. and φωνη, the voice.) A suppression of the voice, without either syncope or coma. A genus of disease in the class *locales*, and order *dyscinesiæ* of Cullen.

When it takes place from a tumour of the fauces, or about the glottis, it is termed *aphonia gutturalis;*

When from a disease of the trachea, *aphonia trachealis;*

And when from a paralysis, or want of nervous energy, *aphonia atonica.*

A′PHORISM. (*Aphorismus;* from αφοριζω, to distinguish.) A maxim, or principle, comprehended in a short sentence.

Aphrodi′sia. (From Αφροδιτη, Venus.) An immoderate desire of venery.

APHRODISIACS. (*Aphrodisiaca*, sc. *medicamenta*, αφροδισιακα; from αφροδισια, venery.) Medicines which excite a desire for venery.

Aphrodisia′sticon. (From αφρος, froth.) A troch so called by Galen, because it was given in dysenteries, where the stools were frothy.

Aphrodi′sius mo′rbus. (From Αφροδιτη, Venus.) The venereal disease.

A′phtha. See *Aphthæ.*

A′PHTHÆ. (Αφθαι: from απτω, to inflame.) The thrush. Frog, or sore mouth. *Aphtha lactucimen* of Sauvages. *Ulcera serpentia oris*, or spreading ulcers in the mouth, of Celsus. *Pustula oris. Alcola. Vesiculæ gingivarum. Acacos. Aphtha infantum.* It is ranked by Cullen in the class *Pyrexiæ*, order *Exanthemata.* A disease to which children are very subject. It appears in small white ulcers upon the tongue, gums, and around the mouth and palate, resembling small particles of curdled milk. When the disease is mild, it is confined to these parts; but when it is violent and of long standing, it is apt to extend through the whole course of the alimentary canal, from the mouth down to the anus; and so to excite severe purgings, flatulencies, and other disagreeable symptoms. The disease, when recent and confined to the mouth, may in general be easily removed; but when of long standing, and extending down to the stomach and intestines, it very frequently proves fatal.

The thrush sometimes occurs as a chronic disease, both in warm climates and in those Northern countries where the cold is combined with a considerable degree of moisture, or where the soil is of a very marshy nature. It may, in some cases, be considered as an idiopatic affection; but it is more usually symptomatic. It shews itself, at first, by an uneasy sensation, or burning heat in the stomach, which comes on by slow degrees, and increases gradually in violence. After some time, small pimples, of about the size of a pin's head, shew themselves on the tip and edges of the tongue; and these, at length, spread over the whole inside of the mouth, and occasion such a tenderness and rawness, that the patient cannot take any food of a solid nature; neither can he receive any vinous or spirituous liquor into his mouth, without great pungency and pain being excited; little febrile heat attends, but there is a dry skin, pale countenance, small pulse, and cold extremities. These symptoms will probably continue for some weeks, the general health being sometimes better and sometimes worse, and then the patient will be attacked with acid eructations, or severe purging, which greatly exhausts its strength, and produces considerable emaciation of the whole body. After a little time, these symptoms cease, and he again enjoys better health; but, sooner or later, the acrid matter shews itself once more in the mouth, with greater virulence than before, and makes frequent translations to the stomach and intestines, and so from these to the mouth again, until, at last, the patient is reduced to a perfect skeleton. Elderly people, and persons with a shattered constitution, are most liable to its attacks. The treatment of the thrush in children is generally to be begun by the exhibition of a gentle emetic: then clear the bowels, if confined, by rhubarb and magnesia, castor oil, or other mild aperient; or sometimes in gross torpid habits by a dose of calomel. In general the prevalence of acid in the primæ viæ appears to lead to the complaint; whence antacid remedies prove beneficial in its progress: when the patient is costive giving the preference to magnesia; when relaxed, to chalk, which may be sometimes joined with aromatics, the mild vegetable astringents, or even a little opium, if the diarrhœa be urgent. Where the child is very weak, and the aphthæ of a dark colour, the decoction of bark or other tonic must be had recourse to. The separation of the sloughs and healing of the ulcers may be promoted by washing the mouth occasionally with the honey of borax, diluted with two or three parts of rose water; or where they are of a dark colour, by the decoction of bark acidulated with sulphuric acid. The diet should be light and nutritious, especially where there is much debility. As the complaint is subsiding, particular attention is required to obviate the bowels becoming confined. In the chronic aphthæ affecting grown persons, pretty much the same plan of treatment is to be pursued: besides which the compound powder of ipecacuanha and other diaphoretics, assisted by the occasional use of the warm bath, wearing flannel next the skin, particularly in a damp cold climate, &c. appear to be beneficial.

A'pis melli'fica. The systematic name of the honey-bee. See *Bee*.

A'PIUM. (*Apium, i, n.* From ηπιος, *Doricè* απιος, mild; or from *apes*, bees; because they are fond of it.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

2. The pharmacopœial name of the herb small-age.

A'pium grave'olens. The systematic name for the *apium* of the pharmacopœias. *Apium, foliolis caulinis, cuneiformibus, umbellis, sessilibus*, of Linnæus. The root, seeds, and fresh plant, are aperient and carminative.

A'pium petroseli'num. The systematic name for the *petroselinum* of the pharmacopœias. *Petroselinum vulgare. Apium hortense.* Common parsley. *Apium foliis caulinis linearibus, involucellis minutis* of Linnæus. Both the roots and seeds of this plant were formerly directed by the London College for medicinal use, and the root is still retained in the Edinburgh pharmacopœia: the former have a sweetish taste, accompanied with a slight warmth or flavour, somewhat resembling that of carrot; the latter are in taste warmer and more aromatic than any other part of the plant, and manifest considerable bitterness. The roots are said to be aperient and diuretic, and have been employed in nephritic pains and obstructions of urine. The seeds possess aromatic and carminative powers, but are seldom prescribed.

Apneu'stia. (From α, and πνεω, to breathe.) A defect or difficulty of respiration, such as happens in a cold, &c. *Foësius.*

Apnœ'a. The same. *Galen.*

Apocapni'smus. (From απο, and καπνος, smoke.) A fumigation.

Apocatha'rsis. (From απο, and καθαιρω, to purge.) An evacuation of humours; a discharge downward; but sometimes applied, with little discrimination, to vomiting.

Apocaulize'sis. (From αποκαυλιζω, to break transversely.) A transverse fracture. *Hippocrates.*

APOCENO'SIS. (From απο, and κενοω, to evacuate.) A superabundant flux of blood, or other fluid, without pyrexia. The name of an order in the class *locales* of Cullen.

Apo'cope. (From απο, and κοπτω, to cut from.) Abscission, or the removal of a part by cutting it off.

Apo'crisis. (From απο, and κρινω, to secrete from.) A secretion of suberabundant humours. *Hippocrates.*

Apocru'stinum. *Apocrusticon.* (From

αποκρουω, to repel.) An astringent or repellent medicine. *Galen.*

Apocru′sticon. See *Apocrustinum.*

Apocye′sis. (From απο, and κυω, to bring forth.) Parturition, or the bringing forth of a child. *Galen.*

Apodacry′tica. (From απο, and δακρυ, a tear.) Medicines which, by exciting tears, remove superfluous humours from the eyes, as onions, &c. *Pliny.*

Apogeu′sia. See *Ageustia.*

Apogeu′sis. See *Ageustia.*

Apoginome′sis. (From απογινομαι, to be absent.) The remission or absence of a disease. *Hippocrates.*

Apoglauco′sis. (From απο, and γλαυκος, sky-coloured; so called because of its blueish appearance.) Glaucoma. A cataract of the eye. *Dioscorides.*

Apo′gonum. (From απο, and γινομαι, to beget.) A living fœtus in the womb. *Hippocrates.*

Apole′psis. (From απο, and λαμβανω, to take from.) An interception, suppression, or retention of urine, or any other natural evacuation. *Hippocrates.*

Apolino′sis. (From απο, and λινον, flax.) The method of curing a fistula, according to Ægineta, by the application of raw flax.

Apo′lysis. (From απο, and λυω, to release.) The solution or termination of a disease. The removal of a bandage. *Erotianus.*

Apoma′gma. (From απο, and ματτω, to cleanse from.) Any thing used to cleanse and wipe away filth from sores, as sponge, &c. *Hippocrates.*

Apomathe′ma. (From απο, neg. and μανθανω, to learn.) Hippocrates expresses, by this term, a forgetfulness of all that has been learnt.

Apo′meli. (From απο, from, and μελι, honey.) An oxymel, or decoction, made with honey.

APONEURO′SIS. (From απο, and νευρον, a nerve; from an erroneous supposition of the antients, that it was formed by the expansion of a nerve.) A tendinous expansion. See *Muscle.*

Apo′nia. (From α, priv. and ϖονος, pain.) Freedom from pain.

Aponitro′sis. (From απο, and νιτρον, nitre.) The sprinkling an ulcer over with nitre.

Apopalle′sis. (From αποπαλλω, to throw off hastily.) An abortion, or premature expulsion of a fœtus. *Hippocrates.*

Apopeda′sis. (From απο, and ϖηδαω, to jump from.) A luxation.

Apophlegma′sia. (From απο, and φλεγμα, phlegm.) A discharge of phlegm, or mucus.

Apophlegma′tica. (From απο, and φλεγμα, phlegm.) *Apophlegmatizantia. Apophlegmatizonta.* Medicines which excite the secretion of mucus from the mouth and nose. Masticatories. Errhines.

Apophra′xis. (From απο, and φρασσω, to interrupt.) A suppression of the menstrual discharge.

Apophtha′rma. (From απο, and φθειρω, to corrupt.) A medicine to procure abortion.

Apo′phthora. (From αποφθειρω, to be abortive.) An abortion.

Apophy′ades. The ramifications of the veins and arteries. *Hippocrates.*

Apo′phyas. (From αποφυω, to proceed from.) Any thing which grows or adheres to another, as a wart to the finger.

APO′PHYSIS. (From αποφυω, to proceed from.) *Appendix. Probole. Ecphysis. Processus. Productio. Projectura. Protuberantia.* A process, projection, or protuberance, of a bone beyond a plain surface; as the nasal apophysis of the frontal bone, &c.

Apophthe′gma. (From αποφθεγγομαι, to speak eloquently.) A short maxim, or axiom; a rule.

Apople′cta. A name formerly applied to the internal jugular vein; so called because in apoplexies, it appears full and turgid. *Bartholin.*

Apople′ctica. (From αποπληξια, an apoplexy.) Medicines against an apoplexy.

APOPLE′XIA. (From απο, and ϖλησσω, to strike or knock down; because persons, when seized with this disease, fall down suddenly.) Apoplexy. A sudden abolition, in some degree of the powers of sense and motion, the patient lying in a sleep-like state; the action of the heart remaining, as well as the respiration, often with a stertorous noise. Cullen arranges it in the class *neuroses,* and order *comata.*

1. When it takes place from a congestion of blood, it is termed *apoplexia sanguinea.*

2. When there is an abundance of serum, as in persons of a cold temperament, *apoplexia serosa.*

3. If it arise from water in the ventricles of the brain, it is called *apoplexia hydrocephalica.* See *Hydrocephalus.*

4. If from a wound, *apoplexia traumatica.*

5. If from poisons, *apoplexia venenata.*

6. If from the action of suffocating exhalations, *apoplexia suffocata.*

7. If from passions of the mind, *apoplexia mentalis.*

8. And when it is joined with catalepsy, *apoplexia cataleptica.*

Apoplexy makes its attack chiefly at an advanced period of life; and most usually on those who are of a corpulent habit, with a short neck, and large head; and who lead an inactive life, make use of a full diet, or drink to excess. The immediate cause of apoplexy, is a compression of the brain, produced either by an accumulation of blood in the vessels of the head, and distending them to such a degree, as to compress the medullary portion of the brain; or by an effusion of blood from the red vessels, or of serum from the exhalants; which fluids are accumulated in such a quantity as to occasion compression. These states, of over-distension and of effusion, may be brought on by whatever increases the afflux and impetus of the blood in the arteries of the head; such as violent fits of passion, great exertions of muscular strength, severe exercise, excess in venery, stooping down for any length of time, wearing any thing too tight about the neck, overloading the stomach, long exposure to excessive cold, or a vertical sun, the sudden suppression of any long-accustomed evacuation, the application of the fumes of certain narcotic and metallic substances, such as opium, alkohol, charcoal, mercury, &c. and by blows, wounds, and other external injuries: in short, apoplexy may be produced by whatever determines too great a flow of blood to the brain, or prevents its free return from that organ.

The young, and those of a full plethoric habit, are most liable to attacks of the sanguineous apoplexy; and those of a phlegmatic constitution, or who are much advanced in life, to the serous. Apoplexy is sometimes preceded by head-ache, giddiness, dimness of sight, loss of memory, faltering of the tongue in speaking, numbness in the extremities, drowsiness, stupor, and night-mare, all denoting an affection of the brain; but it more usually happens that, without much previous indisposition, the person falls down suddenly, the countenance becomes florid, the face appears swelled and puffed up, the vessels of the head, particularly of the neck and temples, seem turgid and distended with blood; the eyes are prominent and fixed, the breathing is difficult and performed with a snorting noise, and the pulse is strong and full. Although the whole body is affected with the loss of sense and motion, it nevertheless takes place often more upon one side than the other, which is called hemiplegia, and in this case, the side least affected with palsy is somewhat convulsed.

In forming an opinion as to the event, we must be guided by the violence of the symptoms. If the fit is of long duration, the respiration laborious and stertorous, and the person much advanced in years, the disease, in all probability, will terminate fatally. In some cases, it goes off entirely; but it more frequently leaves a state of mental imbecility behind it, or terminates in a hemiplegia, or in death. Even when an attack is recovered from, it most frequently returns again, after a short period of time, and in the end proves fatal. In dissections of apoplexy, blood is often found effused on the surface and in the cavities of the brain; and in other instances, a turgidity and distention of the blood-vessels are to be observed. In some cases, tumours have been found attached to different parts of the substance of the brain, and in others, no traces of any real affection of it could be observed.

On an attack of sanguineous apoplexy, all compression should be removed from the neck, the patient laid with his head a good deal raised, and a free admission of cool air allowed. Then blood should be taken freely from the arm or the temporal artery, or the jugular vein; which it may be sometimes necessary to repeat, if the symptoms continue, and the patient is still plethoric; or if blood can less be spared, cupping or leeches may lessen the congestion in the brain. The next object should be thoroughly to evacuate the bowels by some active purgative, as calomel joined with jalap, or with extract of colocynth, or followed by infusion of senna and some neutral salt, with a little tartarized antimony or tincture of jalap repeated every two hours till it operates; or a draught of tincture of senna and wine of aloes, where the bowels are very torpid, may answer the purpose. Stimulant glysters will also be proper, particularly if the patient cannot swallow, as common salt and syrup of buckthorn with a proper quantity of gruel, infusion of senna or infusion of colocynth; or a turpentine glyster in elderly torpid habits. Cold should then be applied assiduously to the scalp, the hair being previously shaved, and a blister to the back of the neck; and diaphoretic medicines may be exhibited, avoiding however those which contain opium. Sinapisms to the feet may also be useful, particularly if these are cold. If under these means, the sensibility does not gradually return, some of the gentle diffusible stimulants will be proper, as ammonia, mustard, æther, camphor, &c.: and at this period, a blister to the scalp may come in aid. By some practitioners emetics are recommended, but their use is hazardous, especially if sufficient evacuations be not premised: and the same may be observed of sternutatories. In the serous form of the disease, general bleeding is inadmissible, and even the local abstraction of blood should be very sparingly made; the bowels should be kept open, especially by aloetic or mercurial formulæ, but not procuring profuse discharges; and the other secretions maintained, especially by the use of the diffusible stimulants already mentioned; blisters to the head, and errhines may be here also useful. When apoplectic symptoms have been occasioned by opium, or other narcotic, the timely discharge of this by an active emetic will be the most important measure; but in a plethoric habit, bleeding should be premised: subsequently various stimulants may be employed, as ammonia, vinegar, &c. endeavouring to procure a determination to the surface, and rousing the patient from his torpid state. The prevention of the sanguineous form of the disease will be best attempted by abstemiousness, regular moderate exercise, and keeping up the evacuations; an issue or seton may also be useful; but under urgent circumstances, bleeding, especially topical, must be resorted to. In leucophlegmatic habits, a more nutritious diet will be proper.

Apopni′xis. (From αποπνιγω, to suffocate.) A suffocation. *Moschion.*

Apopsophe′sis. (From απο, and ψοφεω, to emit wind.) The emission of wind by the anus or uterus, according to Hippocrates.

Apopsy′chia. (From απο, from, and ψυχη, the mind.) The highest degree of deliquium, or fainting, according to Galen.

Apo′ptosis. (From αποπιπτω, to fall down.) A prolapsus, or falling down of any part through relaxation. *Erotian.*

Apore′xis. (From απο, and ορεγω, to stretch out.) A play with balls, in the gymnastic exercises.

Apo′ria. (From α, priv. and ϖορος, a duct.) Restlessness, uneasiness, occasioned by the interruption of perspiration, or any stoppage of the natural secretions.

Aporrhi′psis. (From αποῤῥιπτω, to cast off.) Hippocrates uses this word to signify that kind of insanity where the patient tears off his clothes, and casts them from him.

Aposceparni′smus. (From απο, from, and σκεπαρνιζω, to strike with a hatchet.) *Deasciatio.* A species of fracture, when part of a bone is chipped of. *Gorræus.*

Aposcha′sis. *Aposchasmus.* (From απο, and σχαζω, to scarify.) A scarification. Venesection. *Hippocrates.*

Aposi′tia. *Apositios.* (From απο, from, and σιτος, food.) A loathing of food. *Galen.*

Apospa′sma. (From αποσπαω, to tear off.) A violent, irregular fracture of a tendon, ligament, &c. *Galen.*

Aposphaceli′sis. (From απο, and σφακελος, a mortification.) Hippocrates uses this word to denote a mortification of the flesh in wounds, or fractures, caused by too tight a bandage.

Apo′stasis. (From απο, and ιϛημι, to recede from.)

1. An abscess, or collection of matter.

2. The coming away of a fragment of bone, by fracture.

3. When a distemper passes away by some outlet, Hippocrates calls it an *apostasis by excretion.*

4. When the morbific matter, by its own weight, falls and settles on any part, an *apostasis by settlement.*

5. When one disease turns to another, an *apostasis by metastasis.*

Aposta′xis. (From αποϛαζω, to distil from.) Hippocrates uses this word to express the defluxion or distillation of any humour, or fluid: as blood from the nose.

APOSTE′MA. (From αφιϛημι, to recede.) The term given by the antients to abscesses in general. See *Abscess.*

Apostema′tiai. Those who, from an inward abscess, void pus downwards, are thus called by Aretæus.

Aposteri′gma. (From αποϛηριζω, fulcio.) Galen uses this word to denote a rest of a diseased part, a cushion.

Apostolo′rum ungue′ntum. (From αποστολος, an apostle.) *Dodecapharmacum.* The apostles' ointment; so called because it has twelve ingredients in it, exclusive of the oil and vinegar.

Apo′strophe. (From απο and ϛρεφω, to turn from.) Thus Paulus Ægineta expresses an aversion for food.

Aposyringe′sis. (From απο and συριγξ, a fistula.) The degeneracy of a sore into a fistula. *Hippocrates.*

Aposy′rma. (From απο and συρω, to rub off.) An abrasion or desquamation of the bones or skin. *Hippocrates.*

Apotaneu′sis. (From απο and τεινω, to extend.) An extension, or elongation, of any member or substance.

Apotelme′sis. (From απο and τελμα, a bog.) An expurgation of filth, or fæces.

Apothe′ca. (Αποθηκη: from αποτιθημι, to reposit.) A shop, or vessel, where medicines are sold, or deposited.

APOTHECA′RIUS. (From απο, and τιθημι, *pono,* to put; so called from his employ being to prepare, and keep in readiness, the various articles in the *Materia Medica,* and to compound them for the physician's use; or from αποθηκη, a shop.) An apothecary. In every European country, except Great Britain, the *apothecary* is the same as, in England, we name the *druggist* and *chemist.*

Apotherapei′a. (From απο and ϑεραπευω, to cure.) A perfect cure, according to Hippocrates.

Apotherapeu′tica. (From αποϑεραπευω, to heal.) Therapeutics; that part of medicine which teaches the art of curing disorders.

Apothe′rmum. (From απο and ϑερμη, heat.) An acrimonious pickle, with mustard, vinegar, and oil. *Galen.*

Apo′thesis. (From απο and τιθημι, to replace.) The reduction of a dislocated bone, according to Hippocrates.

Apothli′mma. (From απο and ϑλιϐω, to press from.) The dregs or expressed juice of a plant.

Apothrau′sis. (From απο and ϑραυω, to break.) Apocope. The taking away the splinters of a broken bone.

Apo′tocus. (From απο and τικτω, to bring forth.) Abortive; premature. *Hippocrates.*

Apotre′psis. (From απο and τρεπω, to turn from.) A resolution or reversion of a suppurating tumour.

Apotropæ′a. (From αποτρεπω, to avert.) An amulet, or charm, to avert diseases. *Foësius.*

A′pozem. *Apozema.* (From απο and ζεω, to boil.) A decoction.

Apozeu′xis. (From ἀπο and ζευγνυμι, to separate.) The separation or removal of morbid parts. *Hippocrates.*

Apo′zymos. (From απο and ζυμη, ferment.) Fermented.

APPARA′TUS. (From *appareo,* to appear, or be ready at hand.) This term is applied to the instruments and the preparation and arrangement of every thing necessary in the performance of any operation surgical or chemical.

Appara′tus, chemical. See *Chemical apparatus.*

Appara′tus, pneumatic. See *Pneumatic apparatus.*

Appara′tus mi′nor. See *Lithotomy.*

Appara′tus ma′jor. See *Lithotomy.*

Appara′tus a′ltus. See *Lithotomy.*

Appendi′cula cæ′ci vermifo′rmis. A vermicular process, about four inches in length, and the size of a goose-quill, which hangs to the intestinum cæcum of the human body.

Appendi′culæ epiplo′icæ. *Appendices coli adiposæ.* The small appendices of the colon and rectum, which are filled with adipose substance. See *Omentum.*

Apple, thorn. See *Datura.*

Apple. See *Pyrus.*

Apricot. See *Prunus armeniaca.*

APYRE′XIA. (From α, priv. and πυρεξια, a fever.) Apyrexy. Without fever. The intermission of feverish heat.

A′QUA. See *Water.*

A′qua a′eris fi′xi. Water impregnated with fixed air. This is liquid carbonic acid, or water impregnated with carbonic acid; it sparkles in the glass, has a pleasant acidulous taste, and forms an excellent beverage. It diminishes thirst, lessens the morbid heat of the body, and acts as a powerful diuretic. It is also an excellent remedy in increasing irritability of the stomach, as in advanced pregnancy, and it is one of the best anti-emetics which we possess.

A′qua alu′minis compo′sita. Compound solution of alum, formerly called aqua aluminosa bateana. See *Liquor aluminis compositus.*

A′qua ammo′niæ aceta′tæ. See *Ammoniæ acetatis liquor.*

A′qua ammo′niæ pu′ræ. See *Ammonia.*

A′qua ane′thi. See *Anethum.*

A′qua ca′lcis. See *Calcis liquor.*

A′qua cœle′stis. A preparation of cuprum.

A′qua ca′rui. See *Carum.*

A′qua cinnamo′mi. See *Laurus cinnamomum.*

A′qua cu′pri ammonia′ti. See *Cupri ammoniati liquor.*

A′qua cu′pri vitriola′ti compo′sita. This preparation of the Edinburgh Pharmacopœia, is used externally, to stop hæmorrhages of the nose, and other parts. It is made thus:

℞. *Cupri vitriolati, Aluminis, sing.* ℥ss. *Aquæ puræ,* ℥iv. *Acidi vitriolici,* ʒij.

Boil the salts in water until they are dissolved; then filter the liquor, and add the acid.

A′qua distilla′ta. Distilled water. This is made by distilling water in clean vessels, until about two-thirds have come over. In nature, no water is found perfectly pure. Spring or river water always contains a portion of saline matter, principally sulphate of lime: and, from this impregnation, is unfit for a number of pharmaceutic preparations. By distillation, a perfectly pure water is obtained. The London College directs ten gallons of common water; of which, first distil four pints, which are to be thrown away; then distil four gallons. This distilled water is to kept in glass vessels. See *Water.*

A′qua fœni′culi. See *Anethum fœniculum.*

A′qua fo′rtis. See *Nitric acid.*

A′qua ka′li præpara′ti. See *Potassæ subcarbonatis liquor.*

A′qua ka′li pu′ri. See *Potassæ liquor.*

A′qua litha′rgyri aceta′ti. See *Plumbi subacetatis liquor.*

A′qua litha′rgyri aceta′ti compo′sita. See *Plumbi subacetatis liquor dilutus.*

A′qua me′nthæ piperi′tæ. See *Mentha piperita.*

A′qua me′nthæ sati′væ. See *Mentha viridis.*

A′qua me′nthæ vir′idis. See *Mentha viridis.*

A′qua pime′ntæ. See *Myrtus Pimenta.*

A′qua pule′gii. See *Mentha Pulegium.*

A′qua re′gia. *Aqua regalis.* The acid now called the nitro-muriatic, was formerly called aqua regalis, because it was, at that time, the only acid that was known to be able to dissolve gold. See *Nitro-muriatic acid.*

A′qua ro′sæ. See *Rosa centifolia.*

A′qua sty′ptica. A name formerly given to a combination of powerful astringents, viz. sulphate of copper, sulphate of alum, and sulphuric acid. It has been applied topically to check hæmorrhage, and, largely diluted with water, as a wash in purulent ophthalmia. See *Aqua cupri vitriolati composita.*

A′qua zi′nci vitriola′ti cum ca′mphora. Otherwise named *Aqua vitriolica camphorata.* It was made by dissolving half an ounce of sulphate of zinc in a quart of boiling water, adding half an ounce of camphorated spirit, and filtering. This, when properly diluted, is an useful collyrium for inflammations of the eyes, in which there is a weakness of the parts. Externally it is applied by surgeons to scorbutic and phagedenic ulcerations.

A′quæ distilla′tæ. Distilled waters. These are made by introducing vegetables, as mint, penny-royal, &c. into a still with water; and drawing off as much as is found to possess the properties of the plants. The London College orders the waters to be distilled from dried herbs, because fresh are not ready at all times of the year. Whenever the fresh are used, the weights are to be increased. But whether the fresh or dried herbs are employed, the operator may vary the weight according to the season in which they have been produced and collected. Herbs and seeds, kept beyond the space of a year, are improper for the distillation of waters. To every gallon of these waters, five ounces, by measure, of proof spirit are to be added.

A′quæ minera′les. See *Mineral waters.*

A′quæ stillati′tiæ si′mplices. Simple distilled waters.

A′quæ stillati′tiæ spirituo′sæ. Spirituous distilled waters, now called only spiritus, as spiritus pulegii.

Aquæduct of Fallopius. A canal in the petrous portion of the temporal bone, first accurately described by Fallopius.

Aquatic nut. See *Trapa natans.*

Aqueous humour of the eye. The very limpid watery fluid, which fills both chambers of the eye. See *Eye.*

Aque′tta. The name of a liquid poison, made use of by the Roman women, under the Pontificate of Alexander VII. It was prepared, and sold in drops, by Tophania, or Toffania, an infamous woman who resided at Palermo, and afterwards at Naples. From her, these drops obtained the name of *Aqua Toffania, Aqua della Toffana,* and also *Aqua di Napoli.* This poison is said, by some, to be a composition of arsenic, and by others of opium and cantharides.

Aquifo′lium. (From *acus,* a needle, and *folium,* a leaf; so called on account of its prickly leaf. See *Ilex.*

A′quila. A chemical name formerly used for sal-ammoniac, mercurius præcipitatus, arsenic, sulphur, and the philosopher's stone.

A′quila a′lba. One of the names given to calomel by the antients. See *Submurias hydrargyri.*

A′quila a′lba philosopho′rum. *Aqua alba ganymedis.* Sublimed sal-ammoniac.

A′quila cœle′stis. A panacea, or cure for all diseases; a preparation of mercury.

A′quila ve′neris. A preparation of the antients, made with verdigrise and sublimed sal-ammoniac.

A′quila, among the antients, had many other epithets joined with it, as rubra, salutifera, volans, &c.

A′quilæ ve′næ. (From *aquila,* an eagle.) Branches of the jugular veins, which are particularly prominent in the eagle.

A′quilæ li′gnum. Eagle-wood. It is generally sold for the agallochum.

AQUILE′GIA. (From *aqua,* water, and *lego,* to gather; so called from the shape of its leaves, which retain water.) The herb columbine.

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Pentagynia.*

2. The name, in the Pharmacopœias, for the columbine. See *Aquilegia vulgaris.*

Aquile′gia vulga′ris. The systematic name of the columbine. The seeds, flowers, and the whole plant, have been used medicinally, the first in exanthematous diseases, the latter chiefly as an antiscorbutic. Though retained in several foreign pharmacopœias, their utility seems to be not allowed in this country.

Aquu′la. (Diminutive of *aqua.*) A small quantity of very fine and limpid water. This term is applied to the pellucid water, which distends the capsule of the crystalline lens, and the lens itself. Paulus Ægineta uses it to denote a tumour consisting of a fatty substance under the skin of the eyelid.

Arabic gum. See *Acaciæ gummi.*

A′racalan. Amulets.

A′raca mi′ri. (Indian.) A shrub growing in the Brazils, whose roots are diuretic and antidysenteric.

Ara′chne. (From *arag,* Heb. to weave; or from *αϱαχνη,* a spider.) The spider.

ARACHNOID MEMBRANE. (From *αραχνη,* a spider, and *ειδος,* likeness; so named from its resemblance to a spider's web.) A thin membrane of the brain, without vessels and nerves, situated between the dura and pia mater, and surrounding the cerebrum, cerebellum, medulla oblongata, and medulla spinalis. The term is also applied by some writers to the tunic of the crystalline lens and vitreous humour of the eye.

Arack. (Indian.) An Indian spirituous liquor, prepared in many ways, often from rice; sometimes from sugar, fermented with the juice of cocoa-nuts; frequently from toddy, the juice which flows from the cocoa-nut tree by incision, and from other substances.

A′rados. (From *αϱαδεω,* to be turbulent.) Hippocrates uses this term to signify a commotion in the stomach, occasioned by the fermentation of its contents.

Aræo′tica. (From *αϱαιοω,* to rarefy.) Things which rarefy the fluids of the body.

Ara′lia. (From *ara,* a bank in the sea; so called because it grows upon banks, near the sea.) The berry-bearing angelica. Of the several species of this tree, the roots of the nudicaulis, or naked-stalked, were brought over from North America, where it grows, and sold here for sarsaparilla.

Ara′nea. (From *αϱαω,* to knit together.) The spider.

ARA′NTIUS, Ju′lius Cæsar, a celebrated anatomist and physician, born at Bologna, about the year 1530. After studying under Vesalius, and others, he graduated and became professor there, and died in 1589. In his first work, "On the Human Fœtus," he described the foramen ovale, and ductus arteriosus; and corrected several errors in the anatomy of the gravid uterus, which had been generally derived from the examination of brutes. He afterwards shewed that the blood, after birth, could only pass from the right to the left side of the heart through the vessels of the lungs, thus preparing for the discovery of the circulation by Harvey. A Treatise on Tumours, and a Commentary on Part of Hippocrates, were also written by him.

A′RBOR VI′TÆ. The tree of life.

1. The cortical substance of the cerebellum is so disposed, that, when cut traversely, it appears ramified like a tree, from which circumstance it is termed *arbor vitæ*.

2. The name of a tree formerly in high estimation in medicine. See *Thuya occidentalis*.

ARBUTHNOT, John, a physician, born in Scotland soon after the Restoration, celebrated for his wit and learning. He graduated at Aberdeen, and settling in this metropolis, had the good fortune to be at Epsom, when Prince George of Denmark was taken ill there; whom, having restored to health, he was appointed physician to Queen Anne, but never got into very extensive practice. His chief medical publications were "On the Choice of Aliments," and "On the Effects of Air upon Human Bodies." He died in 1735.

A′RBUTUS. The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Monogynia*. The strawberry tree.

A′rbutus une′do. *Amatzquitl. Unedo papyracea.* A decoction of the bark of the root of this plant is commended in fevers.

A′rbutus u′va u′rsi. The systematic name for the officinal trailing arbutus. Bear's berry, bear's whortle-berry, bear's whorts, or bear's bilberries, called also *vaccaria-vaccinia*. *Arbutus canlibus procumbentibus, foliis integerrimis* of Linnæus. This plant, though employed by the antients in several diseases, requiring adstringent medicines, had almost entirely fallen into disuse until the middle of the present century, when it first drew the attention of physicians, as a useful remedy in calculous and nephritic complaints, which diseases it appears to relieve by its adstringent qualities.

A′rca arcano′rum. The mercury of the philosophers.

A′rca co′rdis. The pericardium.

ARCA′NUM. (A secret.) A medicine whose preparation, or efficacy, is kept from the world, to enhance its value. With the chemists, it is a thing secret and incorporeal; it can only be known by experience, for it is the virtue of every thing, which operates a thousand times more than the thing itself.

Arca′num catho′licum. Bezoar, plantain, and colchicum.

Arca′num du′plex. *Arcanum duplicatum.* A name formerly given to the combination of potash and sulphuric acid, more commonly called vitriolated tartar, and now sulphate of potash.

Arca′num ta′rtari. The acetate of potash.

Arce′uthos. Juniper.

Archæ′us. The universal archæus, or principle of Van Helmont, was the active principle of the material world; it means good health also.

A′rche. (From αρχη, the beginning.) The earliest stage of a disease.

Arche′nda. (Arab.) A powder made of the leaves of the ligustrum, to check the fœtid odour of the feet. Detergent.

Archeo′stis. White briony.

Archima′gia. (From αρχη, the chief, and *maga*, Arab. meditation.) Chemistry, as being the chief of sciences.

Archi′tholus. (From αρχη, the chief, and ϑολος, a chamber.) The sudatorium, or principal room of the antient baths.

A′rchos. (From αρχος, an arch.) The anus; so called from its shape.

Archopto′ma. (From αρχος, the anus, and ϖιπτω, to fall down.) A bearing down of the rectum, or prolapsus ani.

Arcta′tio. (From *arcto*, to make narrow.) *Arctitudo*. Narrowness.

1. A constipation of the intestines, from inflammation.

2. A preternatural straitness of the pudendum muliebre.

A′RCTIUM. (From αρκτος, a bear; so called from its roughness.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*. The burdock.

A′rctium la′ppa. (*Lappa*; απο τȣ λαϐειν, from its seizing the garments of passengers.) The herb clot bur, or burdock. The systematic name for the *bardana*. *Arctium. Betonica. Britannica. Ilaphis.* The plant so called in the pharmacopœias, is *Arctium lappa*: —*foliis cordatis, inermibus, petiolatis*, of Linnæus. It grows wild in uncultivated grounds. The seeds have a bitterish subacrid taste: they are recommended as very efficacious diuretics, given either in the form of emulsion, or in powder, to the quantity of a drachm. The roots taste sweetish, with a slight austerity and bitterness: they are esteemed aperient, diuretic, and sudorific; and are said to act without irritation, so as to be safely ventured upon in acute disorders. Decoctions of them have of late been used, in rheumatic, gouty, venereal, and other disorders; and are preferred by some to those of sarsaparilla. Two ounces of the roots are to be boiled in three pints of water, to a quart; to this, two drachms of sulphate of potash have been usually added. Of this decoction, a pint should be taken every day in scorbutic and rheumatic cases, and when intended as a diuretic, in a shorter period.

Arctu′ra. (From *arcto*, to straiten.) An inflammation of the finger, or toe, from a curvature of the nail. *Linnæus.*

Arcua′lia. (From *arcus*, a bow.) *Arcualis.* The sutura coronalis is so named, from its bow-like shape; and, for the same reason, the bones of the sinciput are called arcualia ossia. *Bartholin.*

Arcua′tio. (From *arcus*, a bow.) A gibbosity of the fore-parts, with a curvation of the sternum of the tibia, or dorsal vertebræ. *Avicenna.*

A′rculæ. (A dim. of *arca*, a chest.) The orbits or sockets of the eyes.

A′rdas. (From αϱδυω, to defile.) Filth, excrement, or refuse. *Hippocrates.*

Ardent Spirit. See *Alkohol.*

A′rdor febri′lis. Feverish heat.

A′rdor uri′næ. *Dysuria.* Scalding of the urine. Difficulty and pain in making water, attended with a sense of heat in the urethra. It is a symptom of gonorrhœa, and some other affections.

A′rdor ventri′culi. Heartburn.

A′rea. An empty space. That kind of baldness where the crown of the head is left naked, like the tonsure of a monk.

Are′ca i′ndica. An inferior kind of nutmeg.

Are′gon. (From αϱηγω, to help.) A resolvent ointment; so called from its valuable qualities.

Arema′ros. Cinnabar.

Are′na. Sand, or gravel.

Arena′mel. (From *arena*, sand; so called because it was said to be procured from sandy places.) *Arenamen.* Bole-armenic.

Arena′tio. (From *arena*, sand.) Saburration, or the sprinkling of hot sand upon the bodies of patients. *Andr. Baccius de Therm.*

Are′ntes. (From *areo*, to dry up.) A sort of antient cupping-glasses, used without scarifying.

ARE′OLA. (A dim. of *area*, a void space.) A small brown circle, which surrounds the nipples of females. During and after pregnancy, it becomes considerably larger.

Aretænoi′des. See *Arytænoides.*

ARETÆ′US, of Cappadocia, a physician, who practised at Rome, but at what period is uncertain, though the most probable opinion places him between the reigns of Vespasian and Adrian. Eight books of his remain "On the Causes, Signs, and Method of treating acute and chronic Diseases," written in the Greek language, and admired for their pure style, and luminous descriptions, as well as the judicious practice generally recommended. He was partial to the use of hellebore and other drastic medicines; and appears to have been among the first to recommend cantharides for blistering the skin.

A′rete. (Αϱετη, virtue.) Hippocrates uses this word to mean corporeal or mental vigour.

Are′us. A pessary, invented by Ægineta.

A′rfar. *Arsag.* Arsenic. *Ruland*, &c.

A′rgal. Argol. Crude tartar, in the state in which it is taken from the inside of wine-vessels, is known in the shops by this name.

Argasy′llis. (From αϱγος, a serpent; which it is said to resemble.) The plant which was supposed to produce gum ammoniac.

A′rgema. (From αϱγος, white.) *Argemon.* A small white ulcer of the globe of the eye. *Erotianus. Galen*, &c.

Arge′nti ni′tras. *Causticum lunare. Argentum nitratum.* Nitrate of silver. "Take of silver an ounce; nitric acid, a fluid-ounce; distilled water, two fluid-ounces. Mix the nitric acid and water, and dissolve the silver therein on a sand bath; then increase the heat gradually that the nitrate of silver may be dried. Melt the salt in a crucible over a slow fire until the water being evaporated, it shall cease to boil; then pour it quickly into moulds of convenient shape." Its virtues are corrosive and astringent. Internally it is exhibited in very small quantities, in epilepsy; and externally it is employed to destroy fungous excrescences, callous ulcers, fistulas, &c. In the latter disease it is employed as an injection; from two grains to three being dissolved in an ounce of distilled water.

ARGE′NTUM. Silver. See *Silver.*

Arge′ntum nitra′tum. See *Nitras argenti.*

Arge′ntum vi′vum. It was formerly, by some, called argentum mobile, and argentum fusum. See *Mercury.*

A′rges. (From αϱγος, white.) A serpent, with a whitish skin, deemed by Hippocrates exceedingly venomous.

Argi′lla. (From αϱγος, white.) White clay; argil; potters' earth.

Argi′lla vitriola′ta. Alum.

Argyri′tis. (From αϱγυϱος, silver.) Litharge, or spume of silver. A kind of earth was formerly so named, which is taken from silver mines, and is bespangled with many particles of silver.

Argyro′come. (From αϱγυϱος, silver, and κομη, hair.) A sort of cudweed, or gnaphalium, was so named from its white silvery floscules.

Argyroli′banos. The white-olibanum.

Argyro′phora. An antidote, in the composition of which there is silver.

Argyrotrophe′ma. (From αϱγος, white, and τϱοφημα, food.) A white cooling food, made with milk. Milk diet. *Galen.*

Arheumati′stos. (From *α*, neg. and *ῥευματιζω*, to be afflicted with rheums.) Not being afflicted with gouty rheums.

Aricy′mon. (From *αρι*, and *κυω*, to be quickly impregnated.) A woman who conceives quickly and often.

Aristalthæ′a. (From *αριϛος*, best, and *αλθαια*, the althæa.) Althæa, or common marsh-mallow.

ARISTOLO′CHIA. (From *αριστος*, good, and *λοχια*, or *λοχεια*, parturition; so called because it was supposed to be of sovereign use in disorders incident to child-birth.) 1. The name of a genus of plants in the Linnæan system. Class, *Gynandria*. Order, *Hexandria*. Birthwort.

2. The pharmacopœial name of the long-rooted birthwort. See *Aristolochia longa*.

Aristolo′chia anguici′da. Snake-killing birthwort. *Aristolochia:—foliis cordatis, acuminatis; caule volubili, fruticoso; pedunculis solitariis; stipulis cordatis*, of Linnæus. The juice of the root of this plant has the property of so stupifying serpents, that they may be handled with impunity. One or two drops are sufficient; and if more be dropt into the mouth, they become convulsed. So ungrateful is the smell of the root to those reptiles, that it is said they immediately turn from it. The juice is also esteemed as a preventive against the effects usually produced by the bite of venomous serpents.

Aristolo′chia clemati′tis. (*Clematitis*, from *κλημα*, a tendril; from its climbing up trees, or any thing it can fasten upon with its tendrils.) *Aristolochia tenuis*. The systematic name of the *Aristolochia vulgaris* of some pharmacopœias. An extract is ordered by the Wirtemberg Pharmacopœia, and the plant is retained in that of Edinburgh. It is esteemed as possessing antipodagric virtues.

Aristolo′chia faba′cea. See *Fumaria bulbosa*.

Aristolo′chia lo′nga. The systematic name for the aristolochia of our pharmacopœias. *Aristolochia foliis cordatis, petiolatis, integerrimis, obtusiusculis; caule infirmo, floribus solitariis.* The root of this plant only is in use; it possesses a somewhat aromatic smell, and a warm bitterish taste, accompanied with a slight degree of pungency. The virtues ascribed to this root by the antients were very considerable; and it was frequently employed in various diseases, but particularly in promoting the discharge of the *lochia*; hence its name. It is now very rarely used, except in gouty affections, as an aromatic stimulant.

Aristolo′chia rotu′nda. The root of this species of birthwort, *Aristolochia foliis cordatis, subsessilibus, obtusis; caule infirmo; floribus solitariis* of Linnæus; is used indiscriminately with that of the *aristolochia longa*. See *Aristolochia longa*.

Aristolo′chia serpenta′ria. The systematic name for the *Serpentaria virginiana* of the pharmacopœias. *Colubrina virgineana. Viperina virgineana. Aristolochia. Pestilochia. Contrayerva virgineana.* Virginian snake-root. The plant which affords this root is the *Aristolochia foliis cordato oblongis planis, caulibus infirmis flexuosis teretibus, floribus solitariis. Caulis geniculata valde nodosa. Flores ad radicem* of Linnæus. Snake-root has an aromatic smell, approaching to that of valerian, but more agreeable; and a warm, bitterish, pungent taste. It was first recommended as a medicine of extraordinary power in counteracting the poisonous effects of the bites of serpents; this, however, is now wholly disregarded: but as it possesses tonic and antiseptic virtues, and is generally admitted as a powerful stimulant and diaphoretic, it is employed, in the present day, in some fevers where these effects are required. A *tinctura serpentariæ* is directed both by the London and Edinburgh Pharmacopœias.

Aristolo′chia te′nuis. See *Aristolochia clematitis*.

Aristolo′chia triloba′ta. Three-lobed birthwort. The root, and every part of this plant, *Aristolochia foliis trilobis, caule volubili, floribus maximis* of Linnæus; is diuretic, and is employed in America against the bite of serpents.

Aristolo′chia vulga′ris. See *Aristolochia clematitis*.

Aristophanei′on. (From *Aristophanes*, its inventor.) The name of an antient emollient plaster, composed of wax, or pitch. *Gorræus*.

Armatu′ra. Harness. The amnios or internal membrane which surrounds the fœtus.

A′rmæ. (From *αρω*, to adapt.) A junction of the lips of wounds; also the joining of the sutures of the head.

Armi′lla. (Dim. of *armus*, the arm.) The round ligament which confines the tendons of the carpus.

Armora′cia. (From *Armorica*, the country whence it was brought.) See *Cochlearia Armoracia*.

Armora′ciæ ra′dix. Horse-radish root. See *Cochlearia Armoracia*.

ARMSTRONG, John, a Scotch physician, born in 1709, who, after graduating at Edinburgh, settled in London, but met with little success, having distinguished himself less in his profession than as a poet, particularly by his "Essay on the Art of preserving Health" in blank verse. He afterwards attended the army in Germany, which brought him more into notice as a physician. He attained the age of seventy, and died in pretty good circumstances. His professional publications are not of much note; the principal one is entitled "Medical Essays." He is supposed, however, to have contributed materially to a useful Treatise on the Diseases of Children, published by his brother George, who after practising many years as an apothecary obtained a diploma in medicine.

A'RNICA. (Αρνικη: from αρς, a lamb; because of the likeness of the leaf of this plant to the coat of the lamb.) Leopard's-bane. Arnica.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia superflua.*

2. The pharmacopœial name of the Mountain arnica.

A'rnica monta'na. The systematic name for the *arnica* of the pharmacopœias. *Arnica foliis ovatis integris; caulinis geminis oppositis* of Linnæus. *Doronicum Germanicum.* The flowers of this plant are very generally employed on the Continent. Of the advantages derived from their use, in paralytic and other affections, depending upon a want of nervous energy, there are several proofs; and their extraordinary virtues, as a febrifuge and antiseptic, have been highly extolled by Dr. Collin, of Vienna. Much caution is necessary in regulating the dose, as it is a medicine very apt to produce vomiting and much uneasiness of the stomach. See *Arnica.*

A'rnica Suede'nsis. See *Inula dysenterica.*

Arno'tto. (Spanish.) A curious shrub in Jamaica, the seeds of which are covered with a kind of wax, from which is made the Spanish arnotto.

ARO'MA. (*Aroma, matis,* neut. from αρι, intensely, and οζω, to smell.) *Spiritus rector.* Each plant has its characteristic smell. This odorant principle is called, by the moderns, *aroma.* Water charged with aroma, is called the distilled water of the substance made use of; thus lavender and peppermint waters are water impregnated with the aroma of the lavender and peppermint.

Aroma'ticus co'rtex. A name for canella alba.

AROMA'TICS. (*Aromatica,* sc. *medicamenta;* from αρωμα, an odour.) A term applied to all medicines which have a grateful spicy scent, and an agreeable pungent taste, as cinnamon bark, cardamoms, &c. Their peculiar flavour appears to reside in their essential oil, and arises in distillation either with water or spirit.

Aromatopo'la. (From αρωμα, an odour, and πωλεω, to sell.) A druggist; a vender of drugs and spiceries.

Arquebusa'de. (A French word, implying *good for a gun-shot wound.*) *Aqua sclopetaria. Aqua vulneraria. Aqua catapultarum.* The name of a spirituous water, distilled from a farrago of aromatic plants.

Arra'ck. A spirituous liquor distilled from rice, and drank, in the rice countries, as brandy is in this Island. Its effects on the animal economy are the same.

A'rraphus. (From α, priv. and ραφη, a suture.) Without suture. It is applied to the cranium when naturally without sutures.

Arrhæ'a. (From α, neg. and ρεω, to flow.) The suppression of any natural flux, as the menses, &c.

ARROWHEAD. The roots of this plant, *Sagittaria sagittifolia* of Linnæus, are said to be esculent, but it must be in times of very great scarcity.

ARROW-ROOT. See *Maranta.*

ARSE'NIAS. (From *arsenicum,* arsenic.) An arseniate or arsenical salt. A salt formed by a combination of arsenic acid with different bases, as arseniate of ammonia, which is produced by the union of ammonia with arsenic acid. The only one used in medicine is the superarseniate of potash. See *Arsenic Acid.*

A'RSENIC. (From the Arabic term *Arsanek,* or from αρσην, for αρρην, *masculus;* from its strong and deadly powers.)

Arsenic is a metal scattered, in great abundance, over the mineral kingdom. It is found in black heavy masses of little brilliancy, called *native arsenic,* (testaceous arsenic.) This exists in different parts of Germany. Mineralised by sulphur, it forms *sulphurised arsenic.* This mineral is met with in Italy, about Mount Vesuvius. — There are two varieties of this ore, which differ from each other in colour, occasioned by the different proportions of their component parts. The one is called yellow *sulphurised arsenic,* or *orpiment;* the other, *red sulphurised arsenic,* or *realgar,* (*ruby arsenic*); both are met with in Hungary and different parts of Germany. The colour of the first ore is a lemon-yellow, inclining sometimes to a green; the colour of the latter is a ruby-red; it is more transparent than the former, and found in compact solid masses, sometimes crystallized in bright needles. Arsenic united to oxygen, constitutes the ore called *native oxide of arsenic.* This ore is scarce; it is generally found of an earthy appearance, or as an efflorescence, coating native, or metallic arsenic; its colour is a whitish-grey; it is rarely met with crystallized. Arsenic exists likewise alloyed with cobalt, antimony, tin, copper, lead, and various other metals.

Properties. — Arsenic is a brittle metal, and in the recent fracture, of a lively bright colour, between tin-white and lead-grey; but, on exposure to the air, it soon loses its metallic lustre, becoming dull, and at last black. Its specific gravity is between 8.310 and 5.763, according to its texture or purity. Its hardness surpasses that of copper; but its ductility is inconsiderable, and its brittleness so great, that it is readily converted into a powder by the hammer. It is entirely volatilised when heated to 356° Fahr. It sublimes in close vessels, and then crystallizes in tetrahedra, or octahedra. When heated with the access of air, it emits a strong smell of garlic, and burns with a blueish-white flame, being converted to a white oxide. It combines with sulphur by fusion. It unites to phosphorus, and combines with most of the metals. It gives a white colour to copper, and renders many of the ductile metals brittle. When mixed with hyper-oxygenated muriate of potash, it detonates strongly by the stroke of a hammer. It is soluble in hydrogen gas by heat. It does not decompose water alone. If it be kept under water, its metallic brilliancy may be preserved. This effect is still better produced by alcohol. It decomposes sulphuric acid by heat. The nitric and nitrous acids oxidate it rapidly. The muriatic acid attacks it with heat. The oxygenated muriatic acid, when in a gaseous state, inflames it instantly. It is nearly unalterable by the fluoric, boracic, phosphoric, and carbonic acids. It unites with alkaline sulphurets, and hydro-sulphurets.

Method of obtaining Arsenic.— In order to obtain metallic arsenic, mix two parts of the white oxide of arsenic of commerce, with one of black flux (obtained by detonating one part of nitrate of potash with two of supertartrate of potash), and put the mixture into a crucible, or melting-pot. Invert over this, another crucible, lute the two together with a little clay and sand, and apply gradually a red heat to the lower one. The oxide of arsenic will be reduced, and be found lining the upper crucible in small crystals of a metallic brilliancy.

The charcoal of the black flux takes in this process the oxygen from the white oxide, and forms carbonic acid gas; which flies off during the process, and the oxide becomes reduced to the metallic state. This reduction of the oxide is greatly facilitated by the alkali of the flux.

Remark.— In order to obtain arsenic in a state of absolute purity, the metal thus obtained must be reduced to a powder, dissolved by heat in nitro-muriatic acid, and then precipitated by immersing into the solution a plate of zinc. The arsenic is thus precipitated in a fine powder, and may be reduced to a mass, by exposing it in a covered crucible to a moderate heat.

Arsenic and its various preparations are the most active of all poisons. That which is mostly taken, is the white oxide, or arsenious acid, to which the following observations apply. A nausea, sickness, and retching, commonly ensue in half an hour after taking it, followed by violent vomitings, hiccups, and pains in the stomach and bowels; convulsions and palsies of the limbs presently succeed, with intense heats, cold sweats, palpitations of the heart, extrême anxiety, prostration of strength, thirst, and dryness of the mouth and throat; loss of reason, and at last death. If the quantity taken has been considerable, the stomach and intestines are often found, upon dissection, corroded, or perforated, and the blood is fluid; though in general the patient expires before the action of the poison has proceeded to such a length. After death, the body runs into sudden putrefaction. When the quantity taken does not prove fatal, it occasions tremors, palsies, or lingering hectics, and in the end death. To detect the presence of arsenic, whether taken by design, the wickedness of others, or imprudence, it is recommended by some to throw on live coals, the contents of the stomach, when a garlicky smell will be immediately obvious. In the stomach, however, there may be many substances, which resemble or disguise the smell of arsenic, especially if the arsenic be in small quantities. We are therefore advised by Hahneman, to boil the contents of the stomach of the person supposed to be destroyed by this poison, in a large quantity of river water; to add to one-third of the filtered liquor, hot and limpid lime-water; to another third, water saturated with sulphuretted hydrogen gas; and to the remainder, a solution of copper, in pure aqua ammoniæ. Each fluid is rendered turbid, if the suspected contents contain arsenic; and the sediment, thrown on live coals, emits the odour of garlic. The white sediment from the lime-water is again dissolved by a recent solution of arsenic; the lemon-coloured sediment, from the sulphuretted hydrogen water thrown on the coals, takes fire, and the smell of sulphur is observed previous to that of garlic; while the yellow-green sediment from the solution of copper is soluble in pure ammonia, and acids of every kind. Another very minute test of the arsenious acid is nitrate of silver, producing a yellow precipitate from the solution, particularly if a little potash or ammonia be previously added, to neutralise the acid. But it must be borne in mind, that nitrate of silver produces a similar precipitate from a solution of phosphate of soda. Indeed no single mode of trial should be relied upon, as we cannot be sure but that some other substance might be similarly affected, where no arsenic is present; and farther, because where arsenic is present many substances will prevent the usual precipitates, or render them of a different colour. It should be remembered also, that the whole of the poison may have been discharged by vomiting, and therefore any matters rejected from the stomach ought to be examined in the same way. If any white substance can be collected, having the appearance of arsenious acid, it will be proper to mix part of it with about the same bulk of charcoal and a little oil; put the mixture between two plates of bright copper, and expose the whole to a faintly red heat; the copper will be changed to a silvery whiteness on its inner surface, supposing arsenic present. But a more important step is to obtain the metal separate.

Any substance suspected to be arsenious acid, or any of the precipitates above mentioned, should be mixed with about the same bulk of finely powdered charcoal and subcarbonate of potash (or of the black flux), the mixture put into a glass tube closed at the bottom, taking care that the part above is quite clean, then partially close the orifice with a piece of paper, and expose the other end to a slight red heat; in a few minutes a brilliant metallic coating will appear on the inside of the tube above the materials introduced, on the supposition that arsenic was there. In all these modes of examination, the judgment will be much assisted by making comparative experiments with the substances suspected, and with what is known to be arsenious acid: as the coincidence is greater, the stronger will be our conviction, that the person had actually taken that poison.

The treatment of poisoning by arsenic is very simple. The chief object is to procure its expulsion from the stomach as speedily and with as little irritation as possible. None of the various antidotes that have been recommended can be depended upon. If the practitioner were consulted before vomiting had come on, it would be proper to attempt to excite that act, by giving a quantity of warm water, and irritating the fauces with a feather; or even exhibiting a mild emetic, as ipecacuanha, unless there were violent pain at the stomach. But in general, before advice is sought, the vomiting has become so severe, that all we can do is by giving repeated large draughts of diluent and demulcent liquids, as water, milk, linseed infusion, or whatever can be most readily procured to render it less painful, and facilitate the thorough evacuation of the poison. It is necessary to remember, that butter, oils, &c. though ranked with demulcents, have been found even injurious, accelerating the fatal event in experiments on animals. Should inflammation supervene in any part of the alimentary canal, marked especially by much pain on pressure, it will be requisite to adopt the antiphlogistic plan; taking blood from the arm, if the habit of the patient will allow it, but particularly applying from ten to twenty leeches over the part affected; then the warm bath may be directed, or fomentations, if the pressure can be borne; likewise copious mucilaginous glisters, &c. If on the other hand, after the discharge of the poison, marks of disturbance of the nervous system appear urgent, antispasmodic or sedative remedies will be indicated, but especially opium. Should the patient fortunately be brought to a state of convalescence, much will depend on a careful regulation of the diet; which should consist of milk, arrow-root, jellies, and other substances, which are nutritious, mild, and easy of digestion: taking care at the same time that the bowels be not confined. Sulphur combined with arsenic appears to lessen its activity; how far it can contribute to remove its effects is perhaps hardly determined by satisfactory experience; but it may certainly be given in small doses without impropriety. Notwithstanding the mischief it is capable of producing, the arsenious acid is a valuable internal remedy, in its appropriate dose, viz. about one-eighteenth part of a grain. See *Arsenicalis liquor*. Externally it is used as a caustic, particularly in cancer.

ARSENIC ACID. This is arsenic fully oxygenated. It is always a product of art.

It is capable of existing in the solid state. It appears in the form of a white pulverulent matter. It attracts humidity from the air. It is soluble in water. The solution possesses a considerable acid taste. It may be evaporated to dryness, and even converted into glass. It is decomposable by all combustible bodies, and by many oxides. It is soluble in some acids, but without change, or intimate combination.

Method of obtaining Arsenic Acid.—Take two ounces of white arsenic in powder, and put it into a tubulated retort; pour on it six or seven ounces of muriatic acid, and apply the heat of a lamp until the arsenious acid is dissolved. Then add three or four ounces of nitric acid, and heat it again gradually. An intestine motion now takes place, and much red vapour, or nitrous gas, is extricated. As soon as in the progress of the operation, the red vapours have ceased, an ounce of finely powdered arsenious acid is to be again added, and the solution effected as before, by a gentle ebullition; to this two ounces of nitric acid must be added, which will produce a second effervescence and discharge of red vapours: the distillation must now be continued to dryness, and the fire must be urged towards the end, to such a degree, as to make the residual mass thoroughly red hot. This mass is arsenic acid, which may either be preserved in that form, or be dissolved in boiling distilled water.

Arsenic acid, united to different bases, forms saline compounds, called ARSENIATES. The only one used in medicine is the superarseniate of potash, which see.

ARSE'NICAL CAUSTIC. A species of caustic said to possess useful properties, independent of those of destroying morbid parts to which it is applied. It is composed of two parts of levigated antimony to one of white arsenic. This is the caustic so extensively employed under the name of arsenical caustic, by the late Mr. Justamond, in his treatment of cancers.

ARSENICA'LIS LI'QUOR. Arsenical solution. "Take of sublimed oxide of arsenic, in very fine powder, subcarbonate of potash from tartar, of each 64 grains; distilled water a pint. Boil them together in a glass vessel, until the arsenic be entirely dissolved. When the solution is cold, add compound spirit of lavender, four fluid-drachms. Then add as much distilled water as may exactly fill a pint measure." This preparation accords with the formula of Dr. Fowler, of Stafford, who first introduced it in imitation of a celebrated popular remedy for intermittents, sold under the name of the tasteless ague-drop. The compound spirit of lavender is only intended to give some colour and taste, without which it would be more liable to mistakes. Where the dose is small, and the effects so powerful, the most minute attention to its proportion and preparation become necessary. Each ounce contains four grains of the oxide, and each drachm half a grain; but it will rarely be proper to go beyond one-sixteenth of a grain as a dose.

Arsenical solution. See *Arsenicalis liquor.*

Arse'nici o'xydum sublima'tum. *Arsenici oxydum præparatum.* This is intended to render the arsenious acid more pure. It is directed to be powdered, put into a crucible, and sublimed by the application of fire into another crucible inverted over the first.

Arsénici óxydum præparátum. See *Arsenici oxydum sublimatum.*

Arsénicum álbum. White arsenic. See Arsenious acid in the article *Arsenic.*

ARSE'NIOUS ACID. White arsenic. Oxide of arsenic. *Arsenicum crystallinum, risagallum, aquala, arfar, aquila, zarnick, artaneck.* Rat's bane. The earliest chemists were embarrassed in the determination of the nature of the poisonous white substance known in commerce by the name of *white arsenic.* Subsequent experiments have shewn that this substance is metallic arsenic oxygenated in the first degree, but possessing the characters of an acid. The name of *arsenious acid* is therefore given to it. It is sometimes found in nature in sublimed crystals, in volcanoes; and in masses, or in stalactites among the ores of arsenic, cobalt, bismuth, and nickel.

It possesses a weak sub-acid taste, which slowly manifests itself. Though of but a feeble acidity, it sensibly reddens the tincture of cabbage and litmus. If placed on burning coals, or on a red-hot iron, it is volatilised in the form of a white vapour, which has a strong smell of garlic. It is slightly soluble in water. With phosphoric and boracic acids it fuses into glass. It decomposes the nitrates and the super-oxygenated muriate of potash. It unites with many of the earths and alkalies, as well as metallic oxides, and forms saline compounds, which are termed arsenites.

Methods of obtaining Arsenious Acid. — 1. Pulverise arsenic, and put as much of it into a Florence flask as will fill it about one half, or less. Introduce a little tow, or cotton, into the neck of the flask, and apply the heat of a lamp. A dense white smoke will be formed, and become precipitated on the internal sides of the flask. If the process be kept up till all the arsenic be oxidated, (which may be known by introducing a wire into the flask for a moment, which will become covered with a white crust, if the sublimation be not completed,) and the heat be then gradually augmented, the sublimed arsenious acid undergoes a sort of fusion, and an opaque white mass, similar to that met with in commerce, is obtained.

2. The arsenious acid of the shops (or white arsenic) is chiefly obtained from arsenical ores of cobalt. These ores are thrown into a furnace, resembling a baker's oven, with a long flue, or chimney, either horizontal or winding, into which the fumes pass, and are condensed into a greyish or blackish powder. This is refined by a second sublimation, in close vessels, with a little alkali to arrest the impurities. As the heat is considerable, it melts the sublimed arsenious acid into those opaque crystalline masses which are known in commerce by the name of white arsenic.

ARTEMI'SIA. (From a queen of that name, who first used it; or from Αρτεμις, Diana; because it was formerly used in the diseases of women, over whom she presided.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia superflua.*

Artemi'sia abro'tanum. The systematic name for the *abrotanum* of the pharmacopœias. *Abrotanum mas. Abrathan.* Common southern-wood.

Artemisia fruticosa, of Linnæus: —*foliis setaceis ramosissimis.* A plant possessed of a strong and, to most people, an agreeable smell; a pungent, bitter, and somewhat nauseous taste. It is supposed to stimulate the whole system, but more particularly the uterus. It is very rarely used unless by way of fomentation, with which intention the leaves are directed.

Artemi'sia absi'nthium. The systematic name for the *Absinthium vulgare* of the pharmacopœias. Common wormwood. Falsely called in our markets *Absinthium Romanum*, or Roman wormwood. *Absinthium Ponticum* of Dioscorides and Pliny, according to *Murray. Artemisia foliis compositis multifidis floribus subglobosis pendulis: receptaculo villoso* of Linnæus. This plant is a native of Britain, and grows about rubbish, rocks, and sides of roads. The leaves of wormwood have a strong disagreeable smell: their taste is nauseous, and so intensely bitter as to be proverbial. The flowers are more aromatic and less bitter than the leaves, and the roots discover an aromatic warmth, without bitterness. This species of wormwood may be considered the principal of the herbaceous bitters. Its *virtus*, in the words of Bergius, is antiputredinosa, antacida, anthelmintica, resolvens, tonica, spasmodica. And, although it is now chiefly employed with a view to the two last-mentioned qualities, yet we are told of its good effects in a great variety of diseases, as intermittent fevers, hypochondriasis, obstructions of the liver and spleen, gout, calculi, scurvy, dropsy, worms, &c. See Woodville's Medical Botany. Cullen thinks it is possessed of a narcotic power, and that there is in every bitter, when largely employed, a power of destroying the sensibility and irritability of the nervous system.

Externally, wormwood is used in discutient and antiseptic fomentations. This plant may be taken in powder, but it is more commonly preferred in infusion. The Edinburgh Pharmacopœia directs a tincture of the flowers, which is, in the opinion of Dr. Cullen, a light and agreeable bitter, and, at the same time, a strong impregnation of the wormwood.

Artemi′sia chine′nsis. *Moxa Japonica. Musia pattræ. Moxa.* Mugwort of China. A soft lanuginous substance, called moxa, is prepared in Japan, from the young leaves of this species of mugwort, by beating them when thoroughly dried, and rubbing them betwixt the hands, till only the fine fibres are left. Moxa is celebrated in the eastern countries for preventing and curing many disorders, by being burnt on the skin; a little cone of it laid upon the part, previously moistened, and set on fire on the top, burns down with a temperate and glowing heat, and produces a dark-coloured spot, the ulceration of which is promoted by putting a little garlic, and the ulcer is either healed up when the eschar separates, or kept running for a length of time, as different circumstances may require.

Artemi′sia juda′ica. The systematic name for the *Santonicum* of the pharmacopœias, according to some botanists. See *Artemisia Santonica.*

Artemi′sia mari′tima. The systematic name for the *Absinthium maritimum* of the pharmacopœias. Sea wormwood, falsely called in our markets, Roman wormwood. *Artemisia: foliis multipartitis, tomentosis; racemis cernuis; flosculis fœmineis ternis* of Linnæus. This plant grows plentifully about the sea-shore, and in salt marshes. The specific differences between it and the common wormwood, artemisia absinthium, are very evident. Its taste and smell are considerably less unpleasant than those of the common wormwood, and even the essential oil, which contains the whole of its flavour concentrated, is somewhat less ungrateful, and the watery extract somewhat less bitter than those of the common wormwood. Hence it is preferred, in those cases where the artemisia absinthium is supposed to be too unpleasant for the stomach. A conserve of the tops of this plant was directed by the London Pharmacopœia.

Artemi′sia po′ntica. The systematic name for the *Absinthium ponticum*, or Roman wormwood, not now used medicinally.

Artemi′sia rupe′stris. The systematic name for the *genipi album* of the pharmacopœias. *Artemisia:—foliis pinnatis; caulibus adscendentibus; floribus globosis, cernuis; receptaculo papposo.* It has a grateful smell, and is used in some countries in the cure of intermittents and obstructed catamenia.

Artemi′sia santo′nica. *Absinthium santonicum Alexandrinum. Sementina. Absinthium seriphium Ægyptium. Scheba Arabum. Zedoariæ sem. Xantolina. Lumbricorum semina. Cina. Semen contra. Semen sanctum.* The Tartarian southern-wood or wormseed, *Artemisia: foliis caulinis linearibus, pinnato-multifidis; ramis indivisis; spicis secundis reflexis; floribus quinquefloris* of Linnæus. The seeds are small, light, and oval, composed of a number of thin membranous coats of a yellowish-green colour, with a cast of brown, easily friable, upon being rubbed between the fingers, into a fine chaffy kind of substance. They are brought from the Levant; have a moderately strong and not agreeable smell, somewhat of the wormwood kind, and a very bitter subacrid taste. Their virtues are extracted both by watery and spirituous menstrua. They are esteemed to be stomachic, emmenagogue, and anthelmintic; but it is especially for the last-mentioned powers that they are now administered, and from their efficacy in this way they have obtained the name of wormseed. To adults the dose in substance is from one to two drachms, twice a-day. Lewis thinks that the spirituous extract is the most eligible preparation of the santonicum, for the purposes of an anthelmintic.

Artemi′sia vulga′ris. Mugwort. This plant, *Artemisia:—foliis pinnatifidis, planis, incisis, subtus tomentosis; racemis simplicibus, recurvatis; floribus radio quinquefloro* of Linnæus, is slightly bitter, and, although in high esteem in former days, is now almost wholly forgotten.

Artemo′nium. (From *Artemon*, its inventor.) A collyrium, or wash for the eyes.

ARTE′RIA. See *Artery.*

Arteri′aca. (From *αϱτηϱια*, an artery.) Medicines formerly used against disorders of the aspera arteria, or trachea.

Arte′riæ adipo′sæ. The arteries which secrete the fat about the kidneys are so called. They are branches of the capsular and diaphragmatic, renal, and spermatic arteries.

Arte′riæ veno′sæ. The four pulmonary veins were so called by the antients.

Arterio′sus du′ctus. See *Ductus arteriosus.*

ARTERIO′TOMY. (From *αϱτηϱια*, an

artery, and τεμνω, to cut.) The opening of an artery. This operation is only performed on the temporal artery.

A'RTERY. (From αηρ, air, and τηρεω, to keep; so called because the antients supposed that only air was contained in them.) *Arteria.* Arteries are membranous pulsating canals, which gradually become less as they proceed from the heart. They are composed of three membranes; a common, or external; a muscular; and an internal one, which is very smooth. They originate from the heart; the pulmonary artery from the right ventricle, and the aorta from the left: the other arteries are all branches of the aorta. Their termination is either in the veins, or in capillary exhaling vessels, or they anastomose with one another. It is by their means that the blood is carried from the heart to every part of the body, for nutrition, preservation of life, generation of heat, and the secretion of the different fluids. The action of the arteries, called the pulse, corresponds with that of the heart, and is effected by the contraction of their muscular, and great elasticity of their outermost coat.

A Table of the Arteries.

All the arteries originate from the pulmonary artery and the aorta.

The *pulmonary artery* emerges from the right ventricle of the heart, soon divides into a right and left branch, which are distributed by innumerable ramifications through the lungs.

The *aorta* arises from the left ventricle of the heart, and supplies every part of the body with blood, in the following order:

a. It first forms an *arch;*
b. It then descends along the spine, and
c. It divides into the two *iliacs.*

a. The ARCH OF THE AORTA gives off three branches.

1. The *arteria innominata,* which divides into the *right carotid* and *right subclavian.*
2. The *left carotid.*
3. The *left subclavian.*

I. The *carotids* are divided into *external* and *internal.*

The *external carotids* give off,

1. The *thyroid,*
2. The *lingual,*
3. The *labial,*
4. The *inferior pharyngeal,*
5. The *occipital,*
6. The *posterior auris,*
7. The *internal maxillary,* from which the *spinous artery of the dura mater,* the *lower maxillary,* and *several branches about the palate and orbit* arise,
8. The *temporal.*

The *internal carotid* affords,

1. The *ophthalmic,*
2. The *middle cerebral,*
3. The *communicans,* which inosculates with the *vertebral.*

II. The *subclavians* give off the following branches:

1. The *internal mammary,* from which the *thymic, comes phrenici, pericardiac,* and *phrenico-pericardiac arteries* arise,
2. The *inferior thyroid,* which gives off the *tracheal, ascending thyroid,* and *transversalis humeri,*
3. The *vertebral,* which proceeds within the vertebræ, and forms within the cranium the *basilary artery,* from which the *anterior cerebelli,* the *posterior cerebri,* and *many branches about the brain* are given off,
4. The *cervicalis profunda,*
5. The *cervicalis superficialis,*
6. The *superior intercostal,*
7. The *supra-scapular.*

As soon as the subclavian arrives at the arm-pit, it is called the *axillary artery;* and when the latter reaches the arm, it is called the *brachial.*

The *axillary artery* gives off,

1. *Four mammary arteries,*
2. The *sub-scapular,*
3. The *posterior circumflex,*
4. The *anterior circumflex,* which ramify about the shoulder-joint.

The *brachial artery* gives off,

1. *Many lateral branches,*
2. The *profunda humeri superior,*
3. The *profunda humeri inferior,*
4. The *great anastomosing artery,* which ramifies about the elbow-joint;

The *brachial artery* then divides, about the bend of the arm, into the *ulnar* and *radial arteries,* which are ramified to the ends of the fingers.

The *ulnar artery* gives off,

1. *Several recurrent branches,*
2. The *common interosseal,* of which the *dorsal ulnar,* the *palmaris profunda,* the *palmary arch,* and the *digitals,* are branches.

The *radial artery* gives off,

1. The *radial recurrent,*
2. The *superficialis volæ,* and then divides into the *palmaris profunda,* and the *digitals.*

b. The DESCENDING AORTA gives off,

In the breast,

1. The *bronchial,*
2. The *œsophageal,*
3. The *intercostals,*
4. The *inferior diaphragmatic;*

Within the abdomen,

1. The *cœliac;* which divides into three branches:
    1. The *hepatic,* from which are given off, before it reaches the liver,
        α. The *duodeno-gastric,* which sends off the *right gastro-epiploic* and the *pancreatico-duodenal,*
        β. The *pylorica superior hepatica;*
    2. The *coronaria ventriculi,*
    3. The *splenic,* which emits the *great* and *small pancreatics,* the *posterior gastric,* the *left gastro-epiploic,* and the *vasa brevia;*

2. The *superior mesenteric,*
3. The *emulgents,*
4. The *spermatics,*
5. The *inferior mesenteric,*
6. The *lumbar arteries,*
7. The *middle sacral.*

c. The aorta then bifurcates into the ILIACS, each of which divide into *external* and *internal.*

The *internal iliac,* called also *hypogastric,* gives off,

1. The *lateral sacrals,*
2. The *gluteal,*
3. The *ischiatic,*
4. The *pudica,* rom which the *external hæmorrhoidal,* the *perineal,* and the *arteriæ penis* arise,
5. The *obturatory.*

The *external iliac* gives off, in the groin,

1. The *epigastric,*
2. The *circumflexa iliaca;*

It then passes under Poupart's ligament, and is called the *femoral artery;* and sends off,

1. The *profunda,*
2. The *ramus anastomoticus magnus,* which runs about the knee-joint;

Having reached the ham, where it gives off some small branches, it is termed the *popliteal.* It then divides into the *anterior* and *posterior tibial.*

The *tibialis antica* gives off,

1. The *recurrent,*
2. The *internal malleolar,*
3. The *external malleolar,*
4. The *tarsal,*
5. The *metatarsal,*
6. The *dorsalis externa halicis.*

The *posterior tibial* sends off,

1. The *nutritia tibiæ,*
2. *Many small branches,*
3. The *internal plantar,*
4. The *external plantar,* from which an *arch* is formed, that gives off the *digitals of the toes.*

ARTHANI'TA. (From αρτος, bread; because it is the food of swine.) The herb sow-bread. See *Cyclamen.*

ARTHRE'MBOLUS. (From αρθρον, a joint, and εμβαλλω, to impel.) An instrument for reducing luxated bones.

ARTHRI'TICA. (From αρθριτις, the gout.) 1. The herb ground-pine; so called because it was thought good against gouty disorders.

2. Remedies for the gout.

ARTHRI'TIS. (*-tidis,* fœm. from αρθρον, a joint; because it is commonly confined to the joints.) The gout. Dr. Cullen, in his Nosology, gives it the name of *podagra,* because he considers the foot to be the seat of idiopathic gout. It is arranged in the class *pyrexiæ,* and order *phlegmasiæ,* and is divided into four species, the regular, atonic, retrocedent, and misplaced. The gout is a very painful disease, preceded usually by flatulency and indigestion, and accompanied by fever, pains in the joints of the hands and feet, particularly in that of the great-toe, and which returns by paroxysms, occurring chiefly in the spring and beginning of winter. The only disorder for which the regular gout can possibly be mistaken, is the rheumatism; and cases may occur wherein there may be some difficulty in making a just discrimination: but the most certain way of distinguishing them will be, to give due consideration to the predisposition in the habit, the symptoms which have preceded, the parts affected, the recurrences of the disease, and its connection with other parts of the system. Its attacks are much confined to the male sex, particularly those of a corpulent habit, and robust body; but every now and then we meet with instances of it in robust females. Those who are employed in constant bodily labour, or who live much upon vegetable food, as likewise those who make no use of wine, or other fermented liquors, are seldom afflicted with the gout. The disease seldom appears at an earlier period of life than from five-and-thirty to forty; and, when it does, it may be presumed to arise from an hereditary disposition. Indolence, inactivity, and too free a use of tartareous wines, fermented liquors, and animal food, are the principal causes which give rise to the gout; but it may likewise be brought on by great sensuality and excess in venery, intense and close application to study, long want of rest, grief, or uneasiness of mind, exposure to cold, too free a use of acidulated liquors, a sudden change from a full to a spare diet, the suppression of any accustomed discharge, or by excessive evacuations; and that it sometimes proceeds from an hereditary disposition, is beyond all doubt, as females who have been remarked for their great abstemiousness, and youths of a tender age, have been attacked with it.

1. *Arthritis regularis.* A paroxysm of regular gout sometimes comes on suddenly, without any previous warning; at other times it is preceded by an unusual coldness of the feet and legs, a suppression of perspiration in them, and numbness, or a sense of prickling along the whole of the lower extremities; and with these symptoms the appetite is diminished, the stomach is troubled with flatulency and indigestion, a degree of torpor and languor is felt over the whole body, great lassitude and fatigue are experienced after the least exercise, the body is costive, and the urine pallid. On the night of the attack, the patient perhaps goes to bed in tolerable health, and after a few hours, is awaked by the severity of the pain, most commonly in the first joint of the great-toe; sometimes, however, it attacks other parts of the foot, the heel, calf of the leg, or perhaps the whole of the foot. The pain resembles that of a dislocated bone, and is attended with the sensation as if cold water was poured upon the part; and th

pain becoming more violent, is succeeded by rigors and other febrile symptoms, together with a severe throbbing and inflammation in the part. Sometimes both feet become swelled and inflamed, so that neither of them can be put to the ground; nor can the patient endure the least motion, without suffering excruciating pain. Towards morning, he falls asleep, and a gentle sweat breaks out, and terminates the paroxysm, a number of which constitutes what is called a fit of the gout; the duration of the fit will be longer or shorter, according to the disposition of the body to the disease, the season of the year, and the age and strength of the patient. When a paroxysm has thus taken place, although there is an alleviation of pain at the expiration of some hours, still the patient is not entirely relieved from it; and, for some evenings successively, he has a return both of pain and fever, which continue, with more or less violence, until morning. The paroxysms, however, prove usually more mild every day, till at length the disease goes off either by perspiration, urine, or some other evacuation; the parts which have been affected becoming itchy, the cuticle falling off in scales from them, and some slight degree of lameness remaining. At first, an attack of gout occurs, perhaps, only once in two or three years; it then probably comes on every year, and, at length, it becomes more frequent, and is more severe, and of longer duration, each succeeding fit. In the progress of the disease various parts of the body are affected, and translations take place from one joint, or limb, to another; and, after frequent attacks, the joints lose their strength and flexibility, and become so stiff as to be deprived of all motion. Concretions, of a chalky appearance, are likewise formed upon the outside of the joints, and nephritic affections of the kidneys arise from a deposit of the same kind of matter in them, which, although fluid at first, becomes gradually dry and firm. This matter is partly soluble in acids, but without effervescence; and Dr. Wollaston discovered it not to be carbonate of lime, but a compound of the uric or lithic acid and soda.

2. *Arthritis atonica.* Atonic gout. It sometimes happens that, although a gouty diathesis prevails in the system, yet, from certain causes, no inflammatory affection of the joints is produced; in which case, the stomach becomes particularly affected, and the patient is troubled with flatulency, indigestion, loss of appetite, eructations, nausea, vomiting, and severe pains; and these affections are often accompanied with much dejection of spirits, and other hypocondriacal symptoms. In some cases, the head is affected with pain and giddiness, and now and then with a tendency to apoplexy; and in other cases, the viscera of the thorax suffer from the disease, and palpitations, faintings, and asthma arise. This is what is called atonic gout.

3. *Arthritis retrograda.* Retrocedent gout. It sometimes happens that, after the inflammation has occupied a joint, instead of its continuing the usual time, and so going off gradually, it ceases suddenly, and is translated to some internal part. The term retrocedent gout is applied to occurrences of this nature. When it falls on the stomach, it occasions nausea, vomiting, anxiety, or great pain; when on the heart, it brings on syncope; when on the lungs, it produces an affection resembling asthma; and, when it occupies the head, it is apt to give rise to apoplexy, or palsy.

4. *Arthritis aberrans,* or misplaced gout, is when the gouty diathesis, instead of producing the inflammatory affection of the joints, occasions an inflammatory affection of some internal part, and which appears from the same symptoms that attend the inflammation of those parts from other causes. All occurrences of this nature, as well as of the two former, are to be regarded as attacks of irregular gout, and are to be guarded against as much as possible.

In the regular gout generally little medical interference is necessary: the antiphlogistic regimen should be observed, in proportion to the strength of the patient, the bowels kept regular, and the part of a moderate temperature, by covering it with flannel, &c.: it may be useful too to promote a gentle diaphoresis. In young and robust constitutions, where there is no hereditary tendency to the disease, and the inflammation and fever run high, more active evacuations may sometimes be required: and, on the contrary, in persons advanced in life, who have suffered much from the disease, and been accustomed to a generous diet, this must be in some degree allowed even during the paroxysm to obviate a metastasis; recommending fish in preference to other animal food, and madeira as the least acescent wine. The application of cold to the part is a dangerous practice; and it is better to abstain from any local measures, lest the favourable progress of the disease should be interrupted. When the paroxysm is terminated, any remaining stiffness of the joint will probably be gradually removed by friction, &c. With respect to the means of obviating future attacks, the chief dependance is to be placed on abstemiousness, with regular moderate exercise. Proper medicines may be occasionally prescribed to remove any dyspeptic symptoms, keep the bowels regular, the skin perspirable, &c. If the disease appear to hang about the patient in the atonic form, a more nutritious diet, with tonic or even stimulant medicines, may be required to re-establish the health, which will probably not be accomplished without a paroxysm intervening. The Bath waters have often been found useful under these circumstances. In the retrocedent gout the object is to bring back the inflammation to the joint as soon as possible: for which purpose a sinapism, or other stimulant application, should be put upon the part; while ammonia, aromatics, æther, warm wine, or brandy and water, &c. are administered internally, in proportion to the urgency of the symptoms; but in general the best form of medicine is the combination of opium with some of the stimulants just mentioned, unless where congestion appears in the head. Sometimes blisters or rubefacients may be properly applied over the internal part affected, where this is of importance to life, or even the local abstraction of blood become necessary. This however holds more especially where the attack is inflammatory, constituting the misplaced gout, and a more antiphlogistic plan must then be pursued; but evacuations cannot be borne to the same extent as in the idiopathic phlegmasiæ.

Arthroca′ce. (From *αϱθϱον*, a joint, and *κακη*, a disease.) An ulcer of the cavity of the bone.

ARTHRO′DIA. (From *αϱθϱοω*, to articulate.) A species of *diarthrosis*, or moveable connection of bones, in which the head of one bone is received into the superficial cavity of another, so as to admit of motion in every direction, as the head of the humerus with the glenoid cavity of the scapula.

ARTHRODY′NIA. (From *αρθρον*, a joint, and *οδυνη*, pain.) Chronic pains in the joints, without pyrexia. It is one of the terminations of acute rheumatism. See *Rheumatismus*.

ARTHROPUO′SIS. (From *αρθρον*, a joint, and *ϖυον*, pus.) *Arthropyosis*. A collection of pus in a joint. It is, however, frequently applied to other affections, as *lumbago psoadica*, &c.

Arthro′sis. (From *αρθϱοω*, to articulate, or join together.) Articulation.

Artichoke. See *Cinara*.

Artichoke, French. See *Cinara*.

Artichoke, jerusalem. See *Helianthus tuberosus*.

Articula′ris. A name given to a disease which more immediately infests the *articuli*, or joints. The morbus articularis is synonymous with the Greek word arthritis, and our gout. A branch of the basilic vein is called articularis vena, because it passes under the joint of the shoulder.

ARTICULATION. (From *articulus*, a joint.) The skeleton is composed of a great number of bones, which are all so admirably constructed, and with so much affinity to each other, that the extremity of every bone is perfectly adjusted to the end of the bone with which it is connected; and this connection is termed their articulation. Anatomists distinguish three kinds of articulation; the first they name Diarthrosis; the second, Synarthrosis; and the third, Amphiarthrosis; which see, under their respective heads.

Arti′scus. (From *αϱτος*, bread.) A troch; so called because they are made like little loaves.

Arto′creas. (From *αϱτος*, bread, and *κϱεας*, flesh.) A nourishing food, made of bread and various meats, boiled together. *Galen*.

Arto′gala. (From *αϱτος*, bread, and *γαλα*, milk.) A cooling food made of bread and milk. A poultice.

Arto′meli. (From *αϱτος*, bread, and *μελι*, honey.) A cataplasm made of bread and honey. *Galen*.

A′RUM. (From the Hebrew word *jaron*, which signifies a dart; so named because its leaves are shaped like a dart; or from *αρα*, injury.)

1. The name of a genus of plants in the Linnæan system. Class, *Gynandria*. Order, *Polyandria*. Arum, or wake-robin.

2. The pharmacopœial name of the common arum, or wake-robin.

A′rum dracu′nculus. The systematic name of the plant called in English dragon's wort, and many-leaved arum. *Dracunculus polyphyllus*. *Colubrina dracontia*. *Erva de Sancta Maria*. *Gigarus serpentaria*. *Arum polyphyllum*. The roots and leaves of this plant are extremely acrimonious, more so than the arum maculatum, with which it agrees in medicinal virtues.

A′rum macula′tum. The systematic name for the *arum* of the pharmacopœias. *Arum: acaule; foliis hastatis, integerrimis; spadice clavato* of Linnæus. The root is the medicinal part of this plant, which, when recent, is very acrimonious; and, upon being chewed, excites an intolerable sensation of burning and prickling in the tongue, which continues for several hours When cut in slices and applied to the skin, it has been known to produce blisters. This acrimony, however, is gradually lost by drying, and may be so far dissipated by the application of heat, as to leave the root a bland farinaceous aliment. In this state, it has been made into a wholesome bread. It has also been prepared as starch. Its medicinal quality, therefore, resides wholly in the active volatile matter, and consequently the powdered root must lose much of its power, on being long kept. Arum is certainly a powerful stimulant, and, by promoting the secretions, may be advantageously employed in cachectic and chlorotic cases, in rheumatic affections, and in various other complaints of phlegmatic and torpid constitutions; but more especially in a weakened or relaxed state of the stomach, occasioned by the prevalence of viscid mucus. If this root is given in powder, great care should be taken that it be young and newly dried, when it may be used in the dose of a scruple, or more, twice a day; but in rheumatisms, and other disorders requiring the full effect of this medicine, the root should be given in a recent state; and, to cover the insupportable pungency it discovers on the tongue, Dr. Lewis advises us to administer it in the form of emulsion, with gum-arabic and spermaceti, increasing the dose from ten grains to upwards of a scruple, three or four times a day. In this way, it generally occasioned a sensation of slight warmth about the stomach, and afterwards, in the remoter parts, manifestly promoted perspiration, and frequently produced a plentiful sweat. Several obstinate rheumatic pains were removed by this medicine. The root answers quite as well as garlic for cataplasms, to be applied on the feet in deliriums. The London College, in their pharmacopœia, 1788, ordered a conserve, in the proportion of half a pound of the fresh root to a pound and a half of double refined sugar, beat together in a mortar, which appears to be one of the best forms of exhibiting arum, as its virtues are destroyed by drying, and are not extracted by any menstruum. It may be given to adults in doses of a drachm.

ARYTÆ'NO-EPIGLOTTIDE'US. Innes. Albinus. *Arytæno-Epiglottici* of Winslow. A muscle composed of a number of fibres running between the arytænoid cartilage and epiglottis. It pulls the side of the epiglottis towards the external opening of the glottis, and when both act, they pull it close upon the glottis.

ARYTÆNOID CARTILAGE. *Cartilago arytænoidea.* The name of two cartilages of the larynx. See *Larynx.*

ARYTÆNOI'DES. (From αρυταινα, a funnel, and ειδος, shape.) The name of some parts, from their being funnel-shaped.

Arytænoide'us major. See *Arytænoideus transversus.*

Arytænoide'us mi'nor. See *Arytænoideus obliquus.*

ARYTÆNOIDE'US OBLI'QUUS. Innes, Albinus, and Winslow. *Arytænoideus minor* of Douglas. A muscle of the glottis, which arises from the base of one arytænoid cartilage, and crossing its fellow, is inserted near the tip of the other arytænoid cartilage. It is a muscle that is occasionally wanting; but when present, and both muscles act, their use is to pull the arytænoid cartilages towards each other.

ARYTÆNOIDE'US TRANSVE'RSUS, of Innes, Albinus, Winslow. *Arytænoideus major* of Douglas. An azygos, or single muscle of the glottis, that arises from the side of one arytænoid cartilage, from near its articulation with the cricoid to near its tip. The fibres run across, and are inserted in the same manner into the other arytænoid cartilage. Its use is to shut the glottis, by bringing the two arytænoid cartilages, with their ligaments, nearer to each other.

ASAFŒ'TIDA. (*Asafœtida, æ, f.* from the Hebrew word *asa,* to heal.) See *Ferula.*

Asa'phatum. (From α, neg. and σαφης, clear.) An intercutaneous itch, generated in the pores, like worms with black heads: so called by reason of their minuteness: they are hardly visible.

Asa'phia. (From α, neg. and σαφης, clear.) A defect in utterance or pronunciation.

Asarabacca. See *Asarum.*

A'sari fo'lia. Asarabacca leaves. The leaves of the Asarum Europæum. See *Asarum.*

A'SARUM. (From α, neg. and σαιρω, to adorn; because it was not admitted into the antient coronal wreaths.) Asarabacca.

1. The name of a genus of plants in the Linnæan system. Class, *Dodecandria.* Order, *Monogynia.*

2. The pharmacopœial name of the asarabacca.

A'sarum Europæ'um. The systematic name of the asarabacca of the shops. *Asarum: foliis reniformibus, obtusis, binis* of Linnæus. It is a native of England, but not very common. The leaves of this plant are extremely acrid, and are occasionally used, when powdered, as a sternutatory. For this purpose the leaves, as being less acrid than the roots, are preferred, and in moderate doses not exceeding a few grains, snuffed up the nose, for several evenings, produce a pretty large watery discharge, which continues for several days together, by which head-ache, tooth-ache, ophthalmia, and some paralytic and soporific complaints have been effectually relieved.

Prior to the introduction of ipecacuanha, the leaves and root of this plant were frequently employed on account of their emetic power: the dose of the dried leaves was 20 grains; of the dried roots 10 grains. As they were occasionally violent in their operation, they have fallen into disuse. See *Asarum.*

Ascaloni'tis. A species of onion.

Asca'rides. The plural of *ascaris.* See *Ascaris.*

A'SCARIS. (From ασκεω, to move about; so called from its continued troublesome motion.) There are several kinds of worms distinguished by this term; but those which claim a place here, as belonging only to the human body, are: —

1. *Ascaris vermicularis, the thread* or *maw worm,* which is very small and slender, not exceeding half an inch in length; they inhabit the rectum.

2. *Ascaris lumbricoides, the long and round worm,* which is a foot in length, and about the breadth of a goose-quill.

Asce'ndens Obli'quus. See *Obliquus internus abdominis.*

A'scia. An axe or chissel. A simple bandage; so called from its shape in position. *Galen.*

ASCI'TES. (*Ascites, æ,* m. from ασκος,

a sack, or bottle; so called from its bottle-like protuberancy.) Dropsy of the belly. A tense, but scarcely elastic, swelling of the abdomen from accumulation of water. Cullen ranks this genus of disease in the class *cachexiæ*, and order *intumescentiæ*. He enumerates two species: —

1. *Ascites abdominalis*, when the water is in the cavity of the peritonæum, which is known by the equal swelling of the parietes of the abdomen.

2. *Ascites saccatus*, or encysted dropsy, in which the water is encysted, as in the ovarium; the fluctuation is here less evident, and the swelling is at first partial.

Ascites is often preceded by loss of appetite, sluggishness, dryness of the skin, oppression at the chest, cough, diminution of the natural discharge of urine, and costiveness. Shortly after the appearance of these symptoms, a protuberance is perceived in the hypogastrium, which extends gradually, and keeps on increasing, until the whole abdomen becomes at length uniformly swelled and tense. The distension and sense of weight, although considerable, vary somewhat according to the posture of the body, the weight being felt the most on that side on which the patient lies, whilst, at the same time, the distension becomes somewhat less on the opposite side. In general, the practitioner may be sensible of the fluctuation of the water, by applying his left hand on one side of the abdomen, and then striking on the other side with his right. In some cases, it will be obvious to the ear. As the collection of water becomes more considerable, the difficulty of breathing is much increased, the countenance exhibits a pale and bloated appearance, an immoderate thirst arises, the skin is dry and parched, and the urine is very scanty, thick, high-coloured, and deposits a lateritious sediment. With respect to the pulse, it is variable, being sometimes considerably quickened, and, at other times, slower than natural. The principal difficulty which prevails in ascites, is the being able to distinguish, with certainty, when the water is in the cavity of the abdomen, or when it is in the different states of encysted dropsy. To form a just judgment, we should attend to the following circumstances:—When the preceding symptoms give suspicion of a general hydropic diathesis; when, at the same time, some degree of dropsy appears in other parts of the body; and when, from its first appearance, the swelling has been equally diffused over the whole belly, we may generally presume that the water is in the cavity of the abdomen. But when an ascites has not been preceded by any remarkable cachectic state of the system, and when, at its beginning, the tumour and tension had appeared in one part of the belly more than another, there is reason to suspect an encysted dropsy. Even when the tension and tumour of the belly have become general, yet, if the system or the body in general appear to be little affected; if the patient's strength be little impaired; if the appetite continue pretty entire, and the natural sleep be little interrupted; if the menses in females continue to flow as usual; if there be yet no anasarca, or though it may have already taken place, if it be still confined to the lower extremities, and there be no leucophlegmatic paleness or sallow colour in the countenance; if there be no fever, nor so much thirst and scarcity of urine as occur in a more general affection: then according as more of these different circumstances take place, there will be the stronger grounds for supposing the ascites to be of the encysted kind. The encysted form of the disease scarcely admits of a perfect cure, though its progress to a fatal termination is generally very slow; and the peritoneal dropsy is mostly very obstinate, depending usually on organic disease in the liver, or other abdominal viscera. The plan of treatment agrees very much with that of *anasarca*; which see. The operation of paracentesis should only be performed where the distension is very great, and the respiration or other important functions impeded; and it will often be better not to draw off the whole of the fluid at once; great care must be taken too to keep up sufficient pressure, by a broad bandage over the abdomen; for even fatal syncope has arisen from the neglect of this. The contraction of the muscles will be promoted by friction. Cathartics are found more decidedly beneficial than in anasarca, where the bowels will bear their liberal use. Diuretics too are of great importance in the treatment; and, among other means of increasing the flow of urine, long-continued gentle friction of the abdomen with oil has been sometimes very successful, probably by promoting absorption in the first instance; the only use of the oil seems to be that the friction is thereby better borne. In cases where visceral obstructions have led to the effusion, these must be removed, before a cure can be accomplished: and for this purpose mercury is the remedy most to be depended upon, besides that, in combination with squill, or digitalis, it will often prove powerfully diuretic. Tonic medicines, a nutritious diet, and, if the complaint appears giving way, such exercise as the patient can take, without fatigue, with other means of improving the general health, ought not to be neglected.

ASCLEPI'ADES, a celebrated physician, born at Prusa, in Bithynia, who flourished somewhat before the time of Pompey. He originally taught rhetoric, but not meeting with success, applied himself to the study of medicine, in which he soon became famous from the novelty of his theory and practice. He supposed disease to arise from the motion of the particles of the blood and other fluids being obstructed by the straitness of the vessels, whence pain, fever, &c. ensued.

He deprecated the use of violent remedies, as emetics and purgatives, but frequently employed glysters, when costiveness attended. In fevers, he chiefly relied on a complete abstinence from food or drink for three days or more; but when their violence abated, allowed animal food and wine. In pleurisies, and other complaints attended with violent pain, he prescribed bleeding; but in those of a chronic nature, depended principally on abstinence, exercise, baths, and frictions. None of his works remain at present. He is said to have pledged his reputation on the preservation of his own health, which he retained to a great age, and died at length from a fall.

ASCLE'PIAS. (From *Asclepias*, its discoverer; or from *Æsculapius*, the god of medicine.) The herb swallow-wort. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

Ascle'pias vinceto'xicum. The systematic name for the *vincetoxicum* of the pharmacopœias. *Hermidinaria. Asclepias.* Swallow wort. Tame poison. The root of this plant smells, when fresh, somewhat of valerian; chewed it imparts at first a considerable sweetness, which is soon succeeded by an unpleasant subacrid bitterness. It is given in some countries in the cure of glandular obstructions.

Ascle'pios. (From *Asclepias*, its inventor.) A dried smegma and collyrium described by Galen.

Asco'ma. (From ασκος, a bottle.) The eminence of the pubes at the years of maturity; so called from its shape.

A'sef. A pustule like a millet seed.

A'segon. *Asegen, Asogen.* Dragon's blood.

ASE'LLIUS, Gaspar, of Cremona, born about the year 1580, taught anatomy at Paris with great reputation. In 1622, he discovered the lacteals in a dog opened soon after a meal, and noticed their valves, but supposed they went to the liver. These vessels, he candidly observes, had been mentioned by some of the earliest medical writers, but not described, nor their function stated; and not being noticed by any modern anatomist previously, the discovery is properly attributed to him. His death took place four years after, subsequent to which his dissertation on the subject was published by his friends.

Ash. See *Fraxinus*.

Asia'ticum ba'lsamum. Balm of Gilead.

A'SINUS. The ass. Its milk is much esteemed in medicine. See *Asses' Milk*.

Asini'num lac. Asses' milk.

Asi'ti. (From α, neg. and σιτος, food.) *Asitia*. Those are so called who take no food, for want of appetite.

A'sjogam. (Indian.) A tree growing in Malabar and the East Indies, whose juice is used against the colic.

Aso'des. (From αδω, to nauseate.) A nausea or loathing, or a fever with much sense of heat and nausea. *Aretæus.*

Aspadia'lis. A suppression of urine from an imperforated urethra.

Aspa'lathum. The aromatic aloe.

Aspa'lathi lignum. See *Lignum Aloes.*

ASPA'RAGUS. (Ασπαϱαγος, a young shoot, before it unfolds its leaves.)

1. The name of a genus of plants in the Linnæan system. Class, *Hexandria*. Order, *Monogynia*. Asparagus.

2. The pharmacopœial name of the common sparage, or sparrow-grass.

Aspa'ragus officinalis. The systematic name of the asparagus, the root of which has been esteemed as a diuretic. It is mostly employed as a food, but it contains very little nourishment.

Aspa'sia. (From α, for αμα, together, and σπαω, to draw.) A constrictive medicine for the pudendum muliebre. *Capivac.*

A'spera arte'ria. (So called from the inequality of its cartilages.) See *Trachea.*

ASPE'RULA. (A diminutive of *asper*, the seeds being rough.) The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Monogynia*. Woodroof.

Aspe'rula odora'ta. The systematic name for the officinal *matrisylva*. It is a low umbelliferous plant, growing wild in woods and copses, and flowering in May. It hath an agreeable odour, which is much improved by moderate drying: the taste is a little austere. It imparts its flavour to vinous liquors; and is commended as a cordial and deobstruent remedy.

Asphalti'tis. A kind of trefoil: the last vertebra of the loins.

ASPHO'DELUS. (From ἀσπις, a serpent, and δειλος, fearful; because it destroys the venom of serpents; or from σποδελος, ashes, because it was formerly sown upon the graves of the dead.) Asphodel.

1. The name of a genus of plants in the Linnæan system. Class, *Hexandria*. Order, *Monogynia*.

2. The pharmacopœial name of the daffodil, or branched asphodel.

Aspho'delus ramo'sus. The systematic name for the officinal *asphodelus*. — *Asphodelus: caule nudo; foliis ensiformibus, carinatis, lævibus*, of Linnæus. The plant was formerly supposed to be efficacious in the cure of sordid ulcers. It is now wholly laid aside.

ASPHY'XIA. (From α, priv. and σφυξις, a pulse.) The state of the body, during life, in which the pulsation of the heart and arteries cannot be perceived. There are several species of asphyxia enumerated by different authors. See *Syncope*.

Aspidi'scus. (From ασπις, a buckler.) The sphincter muscle of the anus was formerly so called from its shape. *Cœlius Aurelianus.*

ASPLE'NIUM. (From α, priv. and σπλην, the spleen; because it was supposed to remove disorders of the spleen.) The herb spleen-wort.

The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Filices.*

Asple'nium ru'ta mura'ria. The systematic name for the *ruta muraria* of the pharmacopœias. It is supposed by some to possess specific virtues in the cure of ulcers of the lungs, and is exhibited in the form of decoction.

Asple'nium scolope'ndrium. The systematic name for the *scolopendrium* of the pharmacopœias. *Phillitis. Lingua cervina.* Harts-tongue. This indigenous plant, *Asplenium — frondibus simplicibus, cordato lingulatis, integerrimis; stipitibus hirsutis* of Linnæus: grows on most shady banks, walls, &c. It has a slightly astringent and mucilaginous sweetish taste. When fresh and rubbed, it imparts a disagreeable smell. Harts-tongue, which is one of the *five capillary* herbs, was formerly much used to strengthen the viscera, restrain hæmorrhages and alvine fluxes, and to open obstructions of the liver and spleen, and for the general purposes of demulcents and pectorals.

Asple'nium tricho'manes. The systematic name for the *trichomanes* of the pharmacopœias. Common maiden-hair, or spleen-wort. *Asplenium: frondibus pinnatis, pinnis subrotundis. crenatis* of Linnæus. This plant is admitted into the Edinburgh Pharmacopœia: the leaves have a mucilaginous, sweetish, subadstringent taste, without any particular flavour: they are esteemed useful in disorders of the breast, being supposed to promote the expectoration of tough phlegm, and to open obstructions of the viscera.

Assaba. A shrub found on the coast of Guinea, whose leaves are supposed to disperse buboes.

A'ssac. (Arab.) Gum ammoniacum.

Assafœ'tida. See *Ferula.*

A'ssala. The nutmeg.

A'ssanus. A weight consisting of two drachms.

Assaraba'cca. See *Asarum.*

Assa'rium. A Roman measure of twelve ounces.

Assarthro'sis. *Articulation.*

A'sse. A loathing of food, from a conflux of humours. *Hippocrates.*

Asses' milk. This is preferred to cows' and other kinds of milk, in phthisical cases, and where the stomach is weak; as containing less oleaginous particles, and being more easily converted into chyle.

Assimula'tion. (*Assimilatio*, from *ad*, and *similis*, to make like to.) The conversion of the food into nutriment.

Assiste'ntes. (From *ad*, and *sisto*, to stand near.) A name of the prostate glands, so called because they lie near the bladder.

Asso'des. (From ασαομαι, to nauseate, or from *assare*, to burn.) *Asodes.* A continual fever, attended with a loathing of food. Sauvages calls it Tritæophya assodes; it is arranged by Cullen under the tertian remittents.

A'ssos. A name given formerly to alumen.

A'stacus mari'nus. (From α, neg. and ςαζω, to distil; so called from the hardness and dryness of its shell.) The lobster. See *Cancer.*

A'stacus fluvia'tilis. The officinal crevis, or cray-fish. See *Cancer.*

A'stapis. (From ςαφις, uva passa.) A raisin.

Asta'rzof. The name of an ointment of litharge, house-leek, &c. *Paracelsus.*

Astchachilos. A malignant ulcer, by some called araneus.

Astera'ntium. (From αςηρ, a star.) *Astericum.* The herb pellitory; so called from its star-like form.

ASTHE'NIA. (From α, priv. and σθενος, strength.) Extreme debility. The asthenic diseases form one great branch of the Brunonian arrangement.

Asthenology. (From α, priv. and σθενος, strength, and λογος, a treatise.) The doctrine of diseases arising from debility. The disciples of the Brunonian school, as they denominate themselves, maintain peculiar opinions on this subject.

A'STHMA. (*Asthma, 'matis*, neut. from ασθμαζω, to breathe with difficulty.) Difficult respiration, returning at intervals, with a sense of stricture across the breast, and in the lungs; a wheezing, hard cough, at first, but more free towards the close of each paroxysm, with a discharge of mucus, followed by a remission. It is ranked by Cullen in the class *neuroses*, and order *spasmi.* There are three species of asthma: —

1. *Asthma spontaneum*, when without any manifest cause.

2. *Asthma plethoricum*, when it arises from plethora.

3. *Asthma exanthematicum*, originating from the repulsion of some acrid humour.

Asthma rarely appears before the age of puberty, and seems to attack men more frequently than women, particularly those of a full habit, in whom it never fails, by frequent repetition, to occasion some degree of emaciation. In some instances, it arises from an hereditary predisposition, and in many others, it seems to depend upon a particular constitution of the lungs. Dyspepsia always prevails, and appears to be a very prominent feature in the predisposition. Its attacks are most frequent during the heats of summer, in the dog-days, and in general commence about midnight. On the evening preceding an attack of asthma, the spirits are often much affected, and the person experiences a sense of fulness about the stomach, with lassitude, drowsiness, and a pain in the head. On the approach of the succeeding evening, he perceives a sense of tightness and stricture across the breast, and a sense of straitness in the lungs, impeding respiration. The difficulty of breathing continuing to increase for some length of time, both inspiration and expiration are performed slowly, and with a wheezing noise; the speech becomes difficult and uneasy, a propensity to coughing succeeds, and the patient can no longer remain in a horizontal position, being as it were threatened with immediate suffocation. These symptoms usually continue till towards the approach of morning, and then a remission commonly takes place; the breathing becomes less laborious and more full, and the person speaks and coughs with greater ease. If the cough is attended with an expectoration of mucus, he experiences much relief, and soon falls asleep. When he awakes in the morning, he still feels some degree of tightness across his breast, although his breathing is probably more free and easy, and he cannot bear the least motion, without rendering this more difficult and uneasy; neither can he continue in bed, unless his head and shoulders are raised to a considerable height. Towards evening, he again becomes drowsy, is much troubled with flatulency in the stomach, and perceives a return of the difficulty of breathing, which continues to increase gradually, till it becomes as violent as on the night before. After some nights passed in this way, the fits at length moderate, and suffer more considerable remissions, particularly when they are attended by a copious expectoration in the mornings, and this continues from time to time throughout the day; and the disease going off at last, the patient enjoys his usual rest by night, without further disturbance. The pulse is not necessarily affected in this disease, though often quickened by the difficulty of breathing; and sometimes slight pyrexia attends. In plethoric habits, the countenance is flushed and turgid during the fit; but in others rather pale and shrunk: in the former too, some difficulty of breathing and wheezing usually remain in the interval; in others, the recovery is more complete. On this is founded the common distinction of asthma into the humid, pituitous, or catarrhal, and the dry, spasmodic or nervous forms. The exciting causes are various: — accumulation of blood, or viscid mucus in the lungs, noxious vapours, a cold and foggy atmosphere, or a close hot air, the repulsion of eruptions, or other metastatic diseases, flatulence, accumulated fæces, violent passions, organic diseases in the thoracic viscera, &c. Sometimes the fits return at pretty regular periods; and it is generally difficult to obviate future attacks, when it has once occurred: but it often continues to recur for many years, and seldom proves fatal, except as inducing hydrothorax, phthisis, &c. The treatment must vary according to the form of the disease. In young persons of a plethoric habit, with great dyspnœa, a flushed countenance, accelerated pulse, &c. the abstraction of blood will be found to afford marked relief; but under opposite circumstances, it might be highly injurious, and we should always avoid repeating it unnecessarily. In ambiguous cases, cupping may be preferred, or leeches to the chest, with blisters. Mild cathartics should also be employed; or where costiveness appears to induce the fits, those of a more active nature. Nauseating emetics are of considerable service, especially where the patient is distressed with viscid mucus, not only by promoting perspiration and expectoration, but also by their antispasmodic power, the return of a paroxysm may often be prevented by their timely use. Squill combined with ipecacuanha is one of the best forms. Where the disease is of the purely spasmodic character, opium will be found the most powerful palliative remedy, especially if combined with ether, though it unfortunately loses of its power by repetition; the fetid gum resins are also useful, particularly where the bowels are torpid; and other antispasmodics may be occasionally employed. The practice of smoking, or chewing tobacco, has sometimes appeared extremely beneficial; and a cup of strong coffee has often afforded speedy relief. Means should also be employed for strengthening the system; and where there appears a tendency to serous effusion, digitalis may be very useful. But by far the most important part of the treatment consists in obviating or removing the several exciting causes, whether operating on the lungs immediately, or through the medium of the primæ viæ, &c. Individual experience can alone ascertain what state of the atmosphere as to temperature, dryness, purity, &c. shall be most beneficial to asthmatics, though a good deal depends on habit in this respect: but a due regulation of this, as well as of the diet, and other parts of regimen, will usually afford more permanent relief than any medicines we can employ.

A'STITES. (From *ad*, and *sto*, to stand near.) A name given by the antients to the prostate glands, because they are situated near the bladder.

ASTRA'GALUS. (Αςραγαλος, a cockle, or die; because it is shaped like the die used in antient games.) 1. The name of a bone of the *tarsus*, upon which the tibia moves. Ancle-bone: also called the sling-bone, or first bone of the foot. *Ballistæ os: aristrios: talus: quatrio: tetroros: cavicula: cavilla: diabebos: peza.* It is placed posteriorly and superiorly in the tarsus, and is formed of two parts, one large, which is called its body, the other small, like a process. The part where these two unite is termed the neck.

2. The name of a genus of plants in the

Linnæan system. Class, *Diadelphia.* Order, *Decandria.* Milk-vetch.

Astra′galus excapus. Stemless milk-vetch. The root of this plant, *Astragalus acaulis excapus; leguminibus lunatis; foliis villosis* of Linnæus, is said to cure confirmed syphilis, especially when in the form of nodes and nocturnal pains.

Astra′galus tragaca′ntha. The former systematic name for the plant which affords the gum tragacanth. See *Astragalus verus.*

Astra′galus ve′rus. Goat's thorn. Milk-vetch. *Spina hirci. Astragalus aculeatus.* We are indebted to a French traveller of the name of Olivier for the discovery that the gum tragacanth of commerce, is the produce of a species of astragalus not before known. He describes it under the name of *astragalus verus*, being different both from A. tragacantha of Linnæus, and from the A. gummifera of Labillardiere. It grows in the North of Persia. Gum tragacanth, or gum dragant, (which is forced from this plant by the intensity of the solar rays, is concreted into irregular lumps or vermicular pieces, bent into a variety of shapes, and larger or smaller proportions, according to the size of the wound from which it issues,) differs from all other known gums in imparting to a very large quantity of water a thick and glutinous consistence. The demulcent qualities of this gum are to be considered as similar to those of gum arabic. It is seldom given alone, but frequently in combination with more powerful medicines, especially in the form of troches, for which it is peculiarly well adapted: it gives name to an officinal compound powder, and was an ingredient in the compound powder of cerusse.

Astra′ntia vulga′ris. (From *astrum*, a star; so called from the star-like shape of its flowers.) *Astrantia nigra.* The herb sanicle masterwort. A rustic purge.

A′strape. (From *αςραπτω*, to corruscate.) Lightning. Galen reckons it among the remote causes of epilepsy.

Astri′cta. (From *astringo*, to bind.) When applied to the belly, it signifies costiveness; thus, alvus astrieta.

ASTRI′NGENTS. (From *astringo*, to constringe.) Remedies which, when applied to the body, render the solids denser and firmer, by contracting their fibres, independently of their living, or muscular power. They thus serve to diminish excessive discharges; and by causing greater compression of the nervous fibrillæ, may lessen morbid sensibility or irritability. Hence they may tend indirectly to restore the strength, when impaired by these causes. The chief articles of this class are the acids, alum, lime-water, chalk, certain preparations of copper, zinc, iron, and lead; with galls and several other vegetable substances which owe their astringency principally to tannin.

ASTRONO′MIA. (From *αςρον*, a star, and *νομος*, a law.) Astronomy, or the knowledge of the heavenly bodies. Hippocrates ranks this and astrology among the necessary studies of a physician.

ASTRUC, John, a learned physician, born in France, 1684. He studied and took his degrees at Montpelier, and became afterwards a professor there. In 1729, he was appointed physician to the king of Poland, but soon returned to his native country, was made consulting physician to the French king, and professor of medicine at Paris, where he attained great celebrity. He was author of numerous medical and philosophical works, but especially one "on Venereal Diseases," which deservedly became extremely popular, and was translated into various modern languages. He lived to the advanced age of 82.

A′suar. Indian myrobalans, or purging nut.

A′sugar. Ærugo æris, or verdigrise.

Asu′oli. Fuligo, or soot; an antispasmodic.

A′tac. Nitre.

Ata′xia. (From *α*, neg. and *τασσω*, to order.) Want of regularity in the symptoms of a disease, or of the functions of an animal body.

Ata′xir. (Arab.) A tenesmus: a disease of the eyes.

Ata′xmir. (Arab.) Removal of preternatural hairs growing under the natural ones on the eye-lids.

A′tebras. A chemical subliming vessel.

Ate′cnia. (From *α*, neg. and *τικτω*, to bring forth.) Venereal impotency: inability to procreate children.

ATHAMANTA. (*Athamanta, æ*, fœm. So named from Athamas in Thessaly.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* Two species are used in medicine.

Athama′nta crete′nsis. The systematic name for the *daucus creticus* of the pharmacopœias. *Myrrhus annua.* Candy carrot. The seeds of this plant, *Athamanta: foliolis linearibus planis, hirsutis; petalis bipartitis; seminibus oblongis, hirsutis*, of Linnæus, are brought from the isle of Candy; they have an aromatic smell, and a slightly biting taste; and are occasionally employed as carminatives and diuretics in diseases of the primæ viæ and urinary passages.

Athama′nta oreoseli′num. The systematic name for the officinal *oreoselinum.* Black mountain parsley. The root and seed of this plant, *Athamanta: foliolis divaricatis* of Linnæus, as well as the whole herb, were formerly used medicinally. Though formerly in so high estimation as to obtain the epithet of *polychresta*, this plant is seldom used in the practice of the present day. An extract and tincture prepared from the root were said to be attenuant, aperient, deobstruent, and lithontriptic. The oil obtained by distillation from the seed was esteemed to allay the toothach; and the whole was recommended as an antiscorbutic and corroborant.

Athana′sia. (From α, priv. and ϑανατος, death; so called because its flowers do not wither easily.) The immortal plant. A name given to tansy; because when stuffed up the nose of a dead corpse, it is said to prevent putrefaction. See *Tanacetum*. It means also immortality. The name of an antidote of Galen, and another of Oribasius: it is the name also of a collyrium described by Aëtius, and of many other compositions.

Atha′nor. (Arab.) A chemical digesting furnace.

A′thara. (From αθηρ, corn.) A panada, or pap for children, made of bruised corn.

Athena. A plaster in much repute among the antients.

Athenato′rium. A thick glass cover formerly used for chemical purposes.

Athenio′nis catapo′tium. The name of a pill in Celsus's writings.

Atheni′ppon. *Athenippum. Diasmyrnes.* The name of a collyrium.

ATHERO′MA. (Αθηρωμα, pulse, pap.) An encysted tumour that contains a soft substance of the consistence of a poultice.

Atho′nor. (Arab.) A chemical furnace.

Athy′mia. (From α, neg. and ϑυμος, courage.) Pusillanimity. Despondence synonymous with melancholia.

Ati′ncar. (Arab.) Borax.

A′TLAS. (From ατλαω, to sustain, because it sustains the head; or from the fable of Atlas, who was supposed to support the world upon his shoulders.) The name of the first cervical vertebra. This vertebra differs very much from the others. See *Vertebræ*. It has no spinous process which would prevent the neck from being bent backwards, but in its place it has a small eminence. The great foramen of this is much larger than that of any other vertebra. Its body, which is small and thin, is nevertheless firm and hard. It is somewhat like a ring, and is distinguished into its *great arch*, which serves in the place of its body, and its *small posterior arch*. The atlas is joined superiorly to the head by ginglymus; and inferiorly, to the second cervical vertebra, by means of the inferior oblique processes and the odontoid process by trochoides.

A′TMOSPHERE. (From ατμος, vapour, and σφαιρα, a globe.) The elastic invisible fluid which surrounds the earth to an unknown height and incloses it on all sides.

Neither the properties nor the composition of the atmosphere, seem to have occupied much the attention of the antients.

Aristotle considered it as one of the four elements, situated between the regions of *water* and *fire*, and mingled with two *exhalations*, the *dry* and the *moist*: the first of which occasioned thunder, lightning, and wind; while the second produced rain, snow, and hail.

The opinions of the antients were vague conjectures, until the matter was explained by the sagacity of Hales, and of those philosophers who followed his career.

Boyle proved beyond a doubt, that the atmosphere contained two distinct substances: —

1. An elastic fluid distinguished by the name of *air*.
2. Water in a state of vapour.

Besides these two bodies it was supposed that the atmosphere contained a great variety of other substances which were continually mixing with it from the earth, and which often altered its properties and rendered it noxious or fatal. Since the discovery of carbonic acid gas by Dr. Black, it has been ascertained that this elastic fluid always constitutes a part of the atmosphere.

The constituent parts of the atmosphere, therefore, are: —

1. Air.
2. Water.
3. Carbonic acid gas.
4. Unknown bodies.

For the properties, composition, and account of the first, see *Air*.

2. *Water.* — That the atmosphere contains water, has been always known. The rain and dew which so often precipitate from it, the clouds and fogs, with which it is often obscured, and which deposit moisture on all bodies exposed to them, have demonstrated its existence in every age. Even when the atmosphere is perfectly transparent, water may be extracted from it in abundance by certain substances. Thus if concentrated sulphuric acid be exposed to air, it gradually attracts so much moisture, that its weight is increased more than three times: it is converted into diluted acid, from which the water may be separated by distillation. Substances which have the property of abstracting water from the atmosphere, have received the epithet of *hygroscopic*, because they point out the presence of that water. Sulphuric acid, the fixed alkalies, muriate of lime, nitrate of lime, and in general all deliquescent salts, possess this property. The greater number of animal and vegetable bodies likewise possess it. Many of them take water from moist air, but give it out again to the air when dry. These bodies augment in bulk when they receive moisture, and diminish again when they part with it. Hence some of them have been employed as *hygrometers* or measures of the quantity of moisture contained in the air around them. This they do by means of the increase or diminution of their length, occasioned by the addition or abstraction of moisture. This change of length is precisely marked by means of an index. The most ingenious and accurate hygrometers are those of Saussure and Deluc. In the first, the substance employed to mark the moisture is a human hair, which by its contractions and dilatations is made

to turn round an index. In the second, instead of a hair, a very fine thin slip of whalebone is employed. The scale is divided into 100°. The beginning of the scale indicates extreme dryness, the end of it indicates extreme moisture. It is graduated by placing it first in air made as dry as possible by means of salts, and afterwards in air saturated with moisture. This gives the extremes of the scale, and the interval between them is divided into 100 equal parts.

The water, which constitutes a component part of the atmosphere, appears to be in the state of vapour, and chemically combined with air in the same manner as one gas is combined with another. As the quantity of the water contained in the atmosphere varies considerably, it is impossible to ascertain its amount with any degree of accuracy.

3. *Carbonic acid gas.*—The existence of carbonic gas as a constituent part of the atmosphere, was observed by Dr. Black immediately after he had ascertained the nature of that peculiar fluid. If we expose a pure alkali or alkaline earth to the atmosphere, it is gradually converted into a carbonate by the absorption of carbonic acid gas. This fact which had been long known, rendered the inference that carbonic acid gas existed in the atmosphere unavoidable, as soon as the difference between a pure alkali and its carbonate had been ascertained to depend upon that acid. Not only alkalies and alkaline earths absorb carbonic acid when exposed to the air, but several of the metallic oxides also.

Carbonic acid gas not only forms a constituent part of the atmosphere near the surface of the earth, but at the greatest heights which the industry of man has been able to penetrate. Saussure found it at the top of Mount Blanc, the highest point of the old continent; a point covered with eternal snow, and not exposed to the influence of vegetables or animals. Limewater diluted with its own weight of distilled water, formed a pellicle on its surface after an hour and three-quarters exposure to the open air on that mountain; and slips of paper moistened with pure potash, acquired the property of effervescing with acids after being exposed an hour and a half in the same place. This was at a height no less than 15,668 feet above the level of the sea. Humboldt has more lately ascertained the existence of this gas in air, brought by Mr. Garnerin from a height not less than 4280 feet above the surface of the earth, to which height he had risen in an air-balloon. This fact is a sufficient proof that the presence of carbonic acid in air does not depend upon the vicinity of the earth.

Now, as carbonic acid gas is considerably heavier than air, it could not rise to great heights in the atmosphere unless it entered into combination with the air. We are warranted, therefore, to conclude, that carbonic acid is not merely mechanically mixed, but that it is chemically combined with the other constituent parts of the atmosphere. It is to the affinity which exists between carbonic acid and air that we are to ascribe the rapidity with which it disperses itself through the atmosphere, notwithstanding its great specific gravity. Fontana mixed 20,000 cubic inches of carbonic acid gas with the air of a close room, and yet half an hour after he could not discover the traces of carbonic acid in that air. Water impregnated with carbonic acid, when exposed to the air, very soon loses the whole of the combined gas. And when a phial full of carbonic acid gas is left uncorked, the gas, as Bergman first ascertained, very soon disappears, and the phial is found filled with common air.

The difficulty of separating this gas from air has hitherto prevented the possibility of determining with accuracy the relative quantity of it in a given bulk of air; but from the experiments which have been made, we may conclude with some degree of confidence, that it is not very different from 0.01. From the experiments of Humboldt, it appears to vary from 0.005 to 0.01. This variation will by no means appear improbable, if we consider that immense quantities of carbonic acid gas must be constantly mixing with the atmosphere, as it is formed by the respiration of animals, by combustion, and several other processes which are going on continually. The quantity, indeed, which is daily formed by these processes is so great, that at first sight it appears astonishing that it does not increase rapidly. The consequence of such an increase would be fatal, as air containing 0.1 of carbonic acid extinguishes light, and is destructive to animals. But there is reason to conclude, that this gas is decomposed by vegetables as rapidly as it forms.

4. *Bodies found in the atmosphere.*—From what has been advanced, it appears that the atmosphere consists chiefly of three distinct elastic fluids united together by chemical affinity; namely, air, vapour, and carbonic acid gas; differing in their proportions at different times and in different places; the average proportion of each is

98.6	air
1.0	carbonic acid
0.4	water
100.0	

But besides these bodies, which may be considered as the constituent parts of the atmosphere, the existence of several other bodies has been suspected in it. It is not meant in this place to include among those bodies electric matter, or the substance of clouds and fogs, and those other bodies which are considered as the active agents in the phenomena of meteorology, but merely those foreign bodies which have been occasionally found or suspected in air. Concerning these bodies, however, very little satisfactory is known at present, as we are not in possession of instruments sufficiently delicate to ascertain their presence. We can indeed detect several of them actually mixing with air, but what becomes of them afterwards we are unable to say.

1. Hydrogen gas is said to have been found in air situated near the crater of volcanoes, and it is very possible that it may exist always in a very small proportion in the atmosphere; but this cannot be ascertained till some method of detecting the presence of hydrogen combined with a great proportion of air be discovered.

2. Carburetted hydrogen gas is often emitted by marshes in considerable quantities during hot weather. But its presence has never been detected in air; so that in all probability it is again decomposed by some unknown process.

3. Oxygen gas is emitted abundantly by plants during the day. There is some reason to conclude that this is in consequence of the property which plants have of absorbing and decomposing carbonic acid gas. Now as this carbonic acid gas is formed at the expense of the oxygen of the atmosphere, as this oxygen is again restored to the air by the decomposition of the acid, and as the nature of atmospheric air remains unaltered, it is clear that there must be an equilibrium between these two processes; that is to say, all the carbonic acid formed by combustion must be again decomposed, and all the oxygen abstracted must be again restored. The oxygen gas which is thus continually returning to the air, by combining with it makes its component parts always to continue in the same ratio.

4. The smoke and other bodies which are continually carried into the air by evaporation, &c. are probably soon deposited again, and cannot therefore be considered with propriety as forming parts of the atmosphere. But there is another set of bodies, which are occasionally combined with air, and which, on account of the powerful action which they produce on the human body, have attracted a great deal of attention. These are known by the name of *contagions*.

That there is a difference between the atmosphere in different places, as far as respects its effects upon the human body, has been considered as an established point in all ages. Hence some places have been celebrated as healthy, and others avoided as pernicious, to the human constitution. It is well known that in pits and mines the air is often in such a state as to suffocate almost instantaneously those who attempt to breathe it. Some places are frequented by peculiar diseases. It is known that those who are much in the apartments of persons ill of certain maladies, are extremely apt to catch the infection; and in prisons and other places, where crowds of people are confined together, when diseases once commence, they are wont to make dreadful havoc. In all these cases, it has been supposed that a certain noxious matter is dissolved by the air, and that it is the action of this matter which produces the mischief.

This noxious matter is in many cases readily distinguished by the peculiarly disagreeable smell which it communicates to the air. No doubt this matter differs according to the diseases which it communicates, and the substance from which it has originated. Morveau lately attempted to ascertain its nature; but he soon found the chemical tests hitherto discovered altogether insufficient for that purpose. He has put it beyond a doubt, however, that this contagious matter is of a compound nature, and that it is destroyed altogether by certain agents. He exposed infected air to the action of various bodies, and he judged of the result by the effect which these bodies had in destroying the fetid smell of the air. The following is the result of his experiments.

1. Odorous bodies, such as benzoin, aromatic plants, &c. have no effect whatever. 2. Neither have the solutions of myrrh, benzoin, &c. in alkohol, though agitated in infected air. 3. Pyroligneous acid is equally inert. 4. Gunpowder, when fired in infected air, displaces a portion of it; but what remains, still retains its fetid odour. 5. Sulphuric acid has no effect; sulphurous acid weakens the odour, but does not destroy it. Distilled vinegar diminishes the odour, but its action is slow and incomplete. 7. Strong acetic acid acts instantly, and destroys the fetid odour of infected air completely. 8. The fumes of nitric acid, first employed by Dr. Carmichael Smith, are equally efficacious. 9. Muriatic acid gas, first pointed out as a proper agent by Morveau himself, is equally effectual. 10. But the most powerful agent is oxymuriatic acid gas, first proposed by Mr. Cruickshanks, and now employed with the greatest success in the British navy and military hospitals.

Thus there are four substances which have the property of destroying contagious matter, and of purifying the air; but acetic acid cannot easily be obtained in sufficient quantity, and in a state of sufficient concentration to be employed with advantage. Nitric acid is attended with inconvenience, because it is almost always contaminated with nitrous gas. Muriatic acid and oxymuriatic acid are not attended with these inconveniences; the last deserves the preference, because it acts with greater energy and rapidity. All that is necessary is to mix together two parts of salt with one part of the black oxide of manganese, to place the mixture in an open vessel in the infected chamber, and to pour upon it two parts of sulphuric acid. The fumes of oxymuriatic acid are immediately exhaled, fill the chamber, and destroy the contagion.

Ato′chia. (From α, neg. and τοκος, offspring; from τικτω, to bring forth.) Inability to bring forth children. Difficult labour.

ATONIC. Relaxed, having a diminution of strength.

A′TONY. (From α, neg. and τεινω, to extend.) A defect of muscular power, weakness, and debility.

Atrabilia′riæ ca′psulæ. See *Renal glands.*

Atrabi′lis. Black bile or melancholy.

Atrache′lus. (From α, priv. and τραχηλος, the neck.) Short-necked.

Atrage′ne. The *Clematis vitalba* of Linnæus: which see.

Atrame′ntum suto′rium. A name of green vitriol.

Atra′sia. (From α, neg. and τιτραω, to perforate.) *Atresia.* Imperforation. A disease where the anus or genitals have not their usual orifice.

Atreta′rum. (From α, neg. and τραω, to perforate.) A suppression of urine from the menses being retained in the vagina.

A′trices. (From α, priv. and θριξ, hair.) Small tubercles about the anus upon which hairs will not grow. *Vaselius.*

A′trici. Small sinuses in the rectum, which do not reach so far up as to perforate into its cavity.

A′TRIPLEX. (*Atriplex-icis*, f. said to be named from its dark colour, whence it was called *atrum olus.*) The name of a genus of plants in the Linnæan system. Class, *Polygamia.* Order, *Monœcia.* Orach.

A′triplex fœ′tida. See *Chenopodium vulvaria.*

A′triplex horte′nsis. The systematic name for the *atriplex sativa* of the pharmacopœias. The herb and seed of this plant, *Atriplex caule erecto herbaceo, foliis triangularibus,* of Linnæus, have been exhibited medicinally as antiscorbutics, but the practice of the present day appears to have totally rejected them.

A′triplex sati′va. See *Atriplex hortensis.*

A′TROPA. (From Ατροπος, the goddess of Destiny; so called from its fatal effects.) The deadly night-shade. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

A′tropa bellado′nna. The systematic name for the *belladonna* of the pharmacopœias. *Solanum melonocerasus. Solanum lethale.* Deadly night-shade or dwale. *Atropa: caule herbaceo; foliis ovatis integris,* of Linnæus. This plant has been long known as a strong poison of the narcotic kind, and the berries have furnished many instances of their fatal effects, particularly upon children that have been tempted to eat them. The leaves were first used internally, to discuss scirrhous and cancerous tumours; and from the good effects attending their use, physicians were induced to employ them internally, for the same disorders; and there are a considerable number of well-authenticated facts, which prove them a very serviceable and important remedy. The dose, at first, should be small; and gradually and cautiously increased. Five grains are considered a powerful dose, and apt to produce dimness of sight, vertigo, &c.

A′tropa mandra′gora. The systematic name for the plant which affords the *radix mandragoræ* of the pharmacopœias. Mandrake. The boiled root is employed in the form of poultice, to discuss indolent tumours.

ATRO′PHIA. (From α, neg. and τρεφω, to nourish.) *Atrophia. Marasmus.* Atrophy. Nervous consumption. This disease is marked by a gradual wasting of the body, unaccompanied either by a difficulty of breathing, cough, or any evident fever, but usually attended with a loss of appetite and impaired digestion. It is arranged by Cullen in the class *cachexiæ*, and order *marcores.* There are four species:—

1. When it takes place from too copious evacuations, it is termed *atrophia inanitorum;* by others called *tabes nutricum;—sudatoria;—à sanguifluxu,* &c.

2. When from famine, *atrophia famelicorum.*

3. When from corrupted nutriment, *atrophia cacochymica.*

4. And when from an interruption in the digestive organs, *atrophia debilium.*

The atrophy of children is called *paidatropia.* The causes which commonly give rise to atrophy, are a poor diet, unwholesome air, excess in venery, fluor albus, severe evacuations, continuing to give suck too long, a free use of spirituous liquors, mental uneasiness, and worms; but it frequently comes on without any evident cause. Along with the loss of appetite and impaired digestion, there is a diminution of strength, the face is pale and bloated, the natural heat of the body is somewhat diminished, and the lower extremities are œdematous. Atrophy, arise from whatever cause it may, is usually very difficult to cure, and not unfrequently terminates in dropsy.

A′trophy. See *Atrophia.*

ATTE′NUANTS. (*Attenuantia,* sc. *medicamenta;* from *attenuo,* to make thin.) Diluents. Those substances are so termed, which possess a power of imparting to the blood a more thin and more fluid consistence than it had previous to their exhibition; such are, *aqua, serum lactis,* &c.

ATTO′LLENS AU′REM. (*Attollens;* from *attollo,* to lift up.) *Attollens auriculæ* of Albinus and Douglas: *Superior auris* of Winslow, and *Attollens auriculam* of Cowper. A common muscle of the ear, which arises, thin, broad, and tendinous, from the tendon of the occipito-frontalis, from which it is almost inseparable, where it covers the aponeurosis of the temporal muscle; and is inserted into the upper part of the ear, opposite to the antihelix. Its use is to draw the ear upwards, and to make the parts into which it is inserted, tense.

Atto'llens o'culi. One of the recti-muscles which lies upon the upper part of the globe and pulls up the eye.

Atto'nitus mo'rbus. (From *attono*, to surprise; so called because the person falls down suddenly.) *Attonitus stupor.* The apoplexy and epilepsy.

ATTRACTION. (From *attraho*, to attract.) Affinity. The terms attraction, or affinity, and repulsion, in the language of modern philosophers, are employed merely as the expression of the general facts, that the masses or particles of matter have a tendency to approach and unite to, or to recede from one another under certain circumstances.

All bodies have a tendency or power to attract each other more or less, and it is this power which is called attraction.

Attraction is mutual, it extends to indefinite distances. All bodies whatever, as well as their component elementary particles, are endued with it. It is not annihilated, at how great a distance soever we suppose them to be placed from each other; neither does it disappear though they be arranged ever so near each other.

The nature of this reciprocal attraction, or at least the cause which produces it, is altogether unknown to us. Whether it be inherent in all matter, or whether it be the consequence of some other agent, are questions beyond the reach of human understanding; but its existence is nevertheless certain.

Proofs of attraction.

That the power of attraction really exists, is obvious from the slightest view of the phenomena of nature. It is proved with mathematical certainty, that the celestial bodies which constitute the solar system, are urged towards each other by a force which preserves them in their orbits. It is further proved beyond any doubt, that this planetary attraction is possessed not only by the heavenly bodies as wholes, but that it also extends to the smaller particles of which they are formed, as may be evinced by means of the following experiments.

First. — If we place two or more globules of mercury on a dry glass or earthen plate, and push them gently towards each other, the globules will attract each other, and form one mass or sphere greater in bulk, but precisely the same in nature.

Secondly. — If a plate of clean glass, perfectly dry, be laid on a large globule of mercury, the globule, notwithstanding the pressure applied to it, continues to preserve its spherical form: if we gradually charge the plate with weights carefully, the globule will be flattened, and become thinner and thinner; but if we again remove the weights from the plate, the mercury will instantly recover its globular figure, and push up the glass before it.

In both these experiments, we see that there exists an attraction between the particles of mercury; in the first, the globules which are in contact with the plate of glass leave this substance completely, they attract each other, and form a sphere greater in bulk. A mere inert fluid would in any case retain the figure it once possessed. It could not be endued with a globular form, unless a real reciprocal attraction among its particles took place, which in the latter experiment is still more striking, for it there is not only superior to gravitation, but actually overcomes an external force.

Thirdly. — If a glass tube of a fine bore be immersed in water, contained in any vessel, the fluid will ascend to a certain height within the tube above its level, and its elevation in several tubes of different sizes, will be reciprocally as the diameter of their bores.

This kind of attraction which takes place as well *in vacuo* as in the open air, has been called capillary attraction. It is this attraction which causes water to rise in sponge, cloth, sugar, sand, &c. for all these substances may be considered as fine tubes in which the fluid ascends.

Remark. — The ascension of fluids in glass tubes of a fine bore, succeeds best when the inside of the tube has been previously moistened, which may conveniently be done by blowing through it with the mouth. And if the water be coloured with a little red or black ink, its ascension will be more obvious, particularly if the tube be held against a sheet of white paper.

Fourthly. — If two plates of glass, previously wetted, be made to meet on one side, and be kept open at the other, at a small distance, by the interposition of a shilling, or any other thin substance, and then immersed in water, the fluid will ascend between the two plates unequally. Its upper surface will form a curve, in which the heights of the several points above the surface of the fluid will be to one another reciprocally, as their perpendicular distance from the line in which the plates meet. The ratio of this attraction is therefore as the squares of the increments with which the plates open.

Here then we have two other instances that an attraction prevails among the particles of bodies. For in both cases, part of the fluid has left the contiguous mass, contrary to the laws of gravitation. It is drawn up as it were, or attracted by the tube, or plate of glass.

Fifthly. — If we immerse a piece of tin, lead, bismuth, silver, or gold, in mercury, and draw it out again immediately, the mercury will attract the metal, and the latter will carry with it a portion of the former, which will stick to it so obstinately as to be inseparable by mere friction.

There exists therefore an attraction between the different metals brought in contact with each other.

Sixthly. — If a small stick be dipt in water or any other fluid, and drawn out again, a drop will be found hanging at the end of it of a spherical form. The drop is spherical, because each particle of the fluid exerts an equal force in every direction, drawing other particles towards it on every side, as far as its power extends.

Thus the very formation of drops obviously demonstrates that there must exist a cause which produces that effect. This cannot be gravity, for, agreeably to experience, that is rather an obstacle to the formation of drops, since by the weight of the particles, large globules resting on solid bodies are flattened, and their regular spherical form prevented.

To explain this phenomenon, there remains only the power of attraction, acting between the particles of the liquid body; for if it is supposed that the particles of a substance reciprocally attract each other with equal force, and their aptitude for being moved upon one another be great enough to overcome any impediment to their motion, it follows by the principles of mechanics, that the equilibrium of the attractive forces can only take place when the mass has received a globular form.

Hence it is, that all liquid bodies assume a spherical figure, when suffered to fall through the air, or form drops.

Division of attraction.

Though we are unable to discover the cause of the mutual attraction, experience has proved to us, that this agency follows certain conditions or laws; for similar phenomena always present themselves, whenever the circumstances of experiment are the same.

Observation has taught us, that attraction takes place between bodies of the same kind, and bodies of a different kind. The first is called *attraction of aggregation*, also *corpuscular attraction; molecular attraction;* and *attraction of cohesion*, or *the cohesive power.*

The latter is termed *chemical attraction, chemical affinity*, or *affinity of composition.*

ATTRACTION OF AGGREGATION.

Corpuscular attraction, or attraction of cohesion or aggregation, is that power by means of which the similar particles of bodies attract each other, and become united into one mass, without changing in the least the chemical properties they possessed before their union. The bodies may be in a solid, fluid, or aëriform state.

This attraction is different in different bodies. It is always in an inverse ratio to the power of repulsion, or the quantity of caloric interposed between the particles of the acting bodies.

It becomes obvious from this, that the agency of attraction of aggregation consists in a mere successive and constant accumulation of similar particles into one mass; and that it produces adherence of surface, or apparent contact in the ratio of the surfaces.

This force is inherent in all the particles of all bodies (caloric and light, perhaps, excepted); we never find the particles of bodies in a detached state, but constantly in masses of greater or smaller magnitude, made up of an indefinite number of particles united together by virtue of the force of cohesion.

The simplest case of the exertion of the attraction of aggregation is that, where two bodies placed in mutual contact with each other form a direct union, without changing their chemical properties: thus if different portions of sulphur be melted together, they form an uniform mass or whole, the particles of which are held together by virtue of the power of attraction of aggregation, but the properties of the body are not altered.

The same effect takes place when pieces of the same metal, or particles of resin, wax, &c. are united in a similar manner.

The force of this attraction in solid bodies may be measured by the weight necessary to overcome it. Thus if a rod of metal, glass, wood, &c. be suspended in a perpendicular direction, and weights be attached to its lower extremity, till the rod is broken by them, the weight attached to the rod just before it broke is the measure of the cohesive force of the rod.

Laws of attraction of aggregation.

1. The agency of attraction of aggregation is exerted only at insensible distances; its force increases as the distance of the bodies presented to each other decreases, and as the surfaces of apparent contact are larger: thus, if we take two sections of a leaden ball, having each a flat and smooth surface, and press them forcibly together, they will cohere, and a considerable effort is necessary to force them asunder: so also two plates of glass wetted with a little water to fill up their inequalities, when laid together, will cohere; and two pieces of marble having each a flat, smooth, and well-polished surface, when moistened and slipt upon each other with a gentle pressure, will unite, and a considerable force is required to separate them. But if the two substances placed together be not sufficiently smooth or polished, it will be in vain to try to cause them to adhere together; for this reason, that the particles touch each other only in a few points, whereas, on the contrary, the

particles of the former flat and smooth surfaces touch each other in many points. It has been noticed, that a silk-worm's thread can be interposed, but not two.

The pressure of the atmosphere has no influence on these experiments, for they succeed equally well *in vacuo* as in the open air.

It is on this account that carpenters, when they intend to glue pieces of wood together, plane the surfaces perfectly smooth before they apply the glue: and that the surfaces of metals are scraped clean before they are soldered, &c.

Hence the attraction of aggregation always vanishes whenever the distance is measurable, and becomes exceedingly great whenever the distance is exceedingly diminished; but the particular rate which this power follows, is still unknown, as we have no method of measuring either the distance at which it acts, or its relative intensity.

2. Attraction of aggregation acts differently in different bodies; according to the degree of force with which it acts between the particles of matter, the bodies appear under different forms.

It is on this account that rock-crystal, flint, diamond, and various other precious stones are extremely hard, for the attraction of aggregation unites the particles of these bodies with a great degree of force. Hence a considerable mechanical effort is necessary to disunite them.

In blocks of marble, chalk, lime-stone, &c. the particles are held together with a force considerably less. In these bodies it prevents all relative motion among the particles themselves, and hence the motion of one particle is followed by the motion of the whole mass; or if that is impossible, the cohesion is destroyed altogether, and the piece breaks.

The integrant parts of wax, tallow, suet, or lard, may be made to change their situations, with a less degree of force than the former.

In these substances, the motion of one particle of the body is not necessarily followed by that of all the rest, neither does that motion destroy the cohesion, nor break them.

The particles of water, spirit, and ether, move or slide over each other very readily; hence their resistance is considerably less.

And lastly, vapours, the air of the atmosphere, and all the gases, yield to the slightest possible impulse.

3. Attraction of aggregation may be annihilated by every effort which tends to separate the particles of bodies, if powerful enough.

It need hardly be mentioned that all mechanical forces, such as grinding, cutting, filling, rasping, pounding, breaking, &c. are of this nature.

In all these cases the force applied must be more than equal to the force of the attraction; and, as it was stated before, that the attraction of aggregation acts with different degrees of force between the particles of different bodies, so different degrees of force are necessary to destroy that attraction in different bodies: and hence it is that chalk is more easily reduced to powder than flint; wood is easier broken than lead; lead easier than iron, &c.

CHEMICAL AFFINITY.

Chemical affinity, or affinity of composition, is that power, by means of which the particles of compound bodies attract each other so intimately as to produce an uniform whole, totally inseparable by mechanical efforts, and the characteristic properties of the compound are often different, and sometimes contrary to those of its constituent parts.

It is obvious from this, that the particles of those bodies which are united by virtue of chemical affinity, form not a mere aggregate, but an entire new body, which can only be altered by the action of another chemical power.

In considering this kind of affinity, it will be necessary to state; — In what manner it takes place between the particles of different bodies; — In what proportion they are capable of combining; — Under what conditions; — With what degree of force they unite; — And what takes place when a variety of different substances are made to act upon each other at the same time, under certain circumstances and in different proportions.

Hence chemical affinity is of greater importance than affinity of aggregation, for it takes place in all the complex operations of chemistry.

Instances of chemical affinity.

To prove that chemical affinity acts differently from attraction of aggregation; that it takes place between the ultimate constituent parts of bodies; and that it produces substances possessing properties, frequently very different, and sometimes contrary to those of the constituent parts, the following experiments may serve.

1. Put into a crucible placed in a coal fire, equal parts by weight of sulphur and mercury; stir the two substances together for a few minutes, and when the sulphur is melted, pour the contents out on a marble slab, or a piece of glass previously warmed and greased.

The substance obtained by this means is a *sulphuret of mercury*, in which the mercury and sulphur are united by virtue of chemical affinity; for the compound has neither the colour, the splendour, the inflammability, the volatility, nor the specific gravity of either of its constituent parts; nor can the sulphur and mercury be separated by mechanical means; they are therefore chemically united.

2. If we melt together two very malleable and ductile metals, for instance, tin and

iron, in equal quantities, the compound produced will have totally lost the properties which its constituent parts possessed before their union, for the alloy formed will be a brittle metal which may easily be broken by the blow of a hammer.

3. Put two or three teaspoonfuls of an aqueous infusion of red cabbage or syrup of violets, into a wine-glass of water, mix it well, and put half the mixture into another glass. By adding a few drops of sulphuric acid to one of the glasses and stirring it, the blue will be changed to a crimson; and by adding an alkali, for instance potash, to the other glass, the blue fluid will be changed into a green.

If we drop carefully down the sides of the glass into the green obtained in this experiment, a few drops of sulphuric acid, crimson will be perceived at the bottom, purple in the middle, and green at the top. On adding a little alkali to the other glass, containing the crimson, these colours will appear in an inverted order.

4. When equal parts of muriate of ammonia and slacked lime, both substances destitute of odour, are intimately blended in a stone mortar, a very pungent gas (ammonia) becomes evolved.

5. Water impregnated with ammonia and concentrated muriatic acid, both fluids of a strong odour, when mixed together in proper proportions, instantly lose their odour, and form a fluid void of smell, (a solution of muriate of ammonia.)

6. Into a saturated solution of muriate of lime, let fall gradually concentrated sulphuric acid, a quantity of pungent vapour will become disengaged, (muriatic acid gas,) and from the two fluids will thus be produced an almost solid compound, called sulphate of lime.

7. Let equal parts of fresh crystallized acetate of lead and acidulous sulphate of alumine and potash, (alum) be rubbed together intimately in a stone mortar, the saline mixture will soon become soft, and lastly fluid.

A like effect is produced by treating in a similar manner equal parts of crystallized nitrate of ammonia and sulphate of soda.

A solid alloy of mercury and bismuth, and another composed of lead and mercury, on being triturated together, instantly become fluid.

It is obvious from this, that when chemical combination takes place, the compound which is formed does not possess properties merely intermediate between those of its component parts, but has acquired others more or less new. This however does not hold good in all cases. There are various combinations in which the properties of bodies are only slightly altered: and in these cases the union does not appear so intimate, as where the change is greater.

Laws of chemical affinity.

Observation has shown that affinity of composition offers certain invariable phenomena, which being founded on a great number of facts are regarded by chemists as laws, and may be reduced under the following heads.

Law I. — Chemical affinity can exert its action between a number of bodies, simple or compound, and unite them chemically into one whole.

Law II. — The efficacy of chemical affinity is in an inverse ratio to that of attraction of aggregation.

Law III. — The agency of chemical affinity is influenced by temperature; its action is either accelerated, retarded, prevented, or rendered efficacious.

Law IV. — Chemical affinity is generally accompanied by a change of temperature at the instant of its action.

Law V. — The chemical affinity existing between two or more bodies may be dormant, until it is called into action by the interposition of another body which frequently exerts no energy upon any of them in a separate state.

Law VI. — The ratio of the energy of chemical affinity acting between various bodies, is different in different substances.

Law VII. — The agency of chemical affinity is either limited, or unlimited in certain bodies; in other words, chemical affinity is capable of uniting bodies in definite, or in indefinite proportions.

Law VIII. — The energy of the chemical affinity of different bodies is modified in proportion to the ponderable quantities of the bodies placed within the sphere of action.

Such are the leading laws which regulate chemical affinity; they may be demonstrated by experiments.

I. Chemical affinity can exert its action between a number of bodies, simple or compound, and unite them chemically into one whole: —

There are an infinite variety of compounds, consisting of three, four, five or more simple substances in nature; and art can also effect combinations in which there are many simple bodies chemically united into one whole.

It frequently happens that various separate bodies presented to each other in a fluid, unite and form a single mass, which possesses all the characters of an homogeneous compound, and which retains these characters till its composition has been altered by chemical means.

A considerable number of triple salts are known, which consist of three different substances; for instance, the common alum of commerce consists of sulphuric acid united to alumine and potash or ammonia. The salt formerly called microcosmic salt, or phosphate of soda and ammonia, consists of phosphoric acid united to soda and ammonia, &c. When the oxygenated muriate of mercury is precipitated by the precise quantity of carbonate of soda which is requisite to effect its decomposition, the precipitate obtained contains muriatic acid, carbonic acid, and oxide of mercury in excess.

It is a well-known fact that two, three, or more metals may be fused together so as to produce compounds whose properties are widely different from those of the constituent parts.

Melt together in an iron ladle or crucible, eight parts of bismuth, five of lead, and three of tin, the fusibility of the metals will thus be altered, for the alloy melts at 212° Fahr. A spoon or any other utensil formed of this compound will therefore melt in water kept boiling.

If in a similar manner an alloy be made of lead, tin, bismuth, and mercury, their proportions being two, three, five, and one, the compound produced melts at a heat even less than that of boiling water.

A composition of lead, zinc, and bismuth, in equal parts, may be kept in fusion upon paper over a lamp.

II. The efficacy of chemical affinity is in an inverse ratio to that of corpuscular attraction: —

The cohesion of the particles of a body is owing to the mutual affinity existing between them. It is this force which must be overcome by the action of the substance which has a tendency to combine with those particles chemically. Chemical affinity therefore does not become *stronger* as the affinity of aggregation becomes *weaker*, it becomes only *more efficacious;* the absolute powers remain the same; the effect produced by that agency *increases*, because the resistance opposed to it *decreases*.

Remark.—It is from this law that it was formerly inferred that some or at least one of the bodies should be in a state of fluidity. This however is by no means necessary. It is in general true, that the weaker the attraction of aggregation is, the more easily chemical affinity takes place, as may be evinced by means of the following experiments:

Let any quantity of dry carbonate of soda and tartaric acid be mingled together, and put the mixture into a wine glass, no obvious chemical change will be produced; but if water be added, or either of the salts be previously dissolved, a violent effervescence ensues, and a chemical union is obtained.

The water added is of use merely to overcome the resistance which arises from the cohesion of the particles of the salts intended to be brought into the sphere of action, or to increase their mutual contact.

If we let fall a crystal, or lump of fluor spar, (fluate of lime,) into concentrated sulphuric acid, no sensible action will take place, both the sulphuric acid and the fluate of lime remain unaltered; but if the former be reduced to powder, and then brought into contact with the acid, a considerable action instantly takes place, the sulphuric acid unites to one of the constituent parts of the fluor spar, namely, to the lime, and its other constituent part, the fluoric acid, becomes disengaged in the state of white vapour, or fluoric acid gas.

If crystallized alum, or sulphate of soda, and acetate of lead, are brought into contact with each other, the individuality of these bodies will not be destroyed, that is to say, no chemical change will take place; but if they be intimately rubbed together in a mortar, the two solids will act upon each other and form a fluid.

It is obvious therefore that in order to facilitate chemical affinity, the attraction of aggregation must be broken; the bodies intended to be chemically united must not be presented to each other in mass, but mechanically divided, or reduced to the smallest molecules possible: hence liquids combine with more facility than solids, or even than a solid and a liquid, and in like manner vapours combine with rapidity and ease.

III. The agency of chemical affinity is influenced by temperature. Its action is either accelerated, retarded, prevented, or rendered efficacious: —

If we expose phosphorus in an open vessel to the action of the atmosphere, a chemical union will take place between the phosphorus and one of the constituent parts of the atmosphere, namely, the oxygen gas; the phosphorus will gradually (but very slowly) disappear, and become converted into a fluid called phosphorous acid.

But if we heat the vessel containing the phosphorus, the latter will take fire, and become converted into a white substance, which in a short time is changed into an acid analogous to the former.

If equal quantities of muriate of ammonia and carbonate of magnesia are mixed with six or eight parts of water, and suffered to stand for some time exposed to the ordinary temperature of the atmosphere, a mutual decomposition of the two salts will take place. For if the fluid which passes the filter, be left to evaporate spontaneously, muriate of magnesia and carbonate of ammonia will be obtained. On the contrary:

If equal quantities of muriate of magnesia and carbonate of ammonia be exposed to a temperature of 200° in about four parts of water, the products obtained are, muriate of ammonia and carbonate of magnesia.

If muriate of soda and sulphate of magnesia be mixed together in any proportion, and exposed to a temperature below *zero*, they decompose each other, and muriate of magnesia and sulphate of soda are formed, but no decomposition takes place at a temperature above 30°.

Muriate of soda and acidulous sulphate

of alumine and potash, exhibit precisely the same phenomena.

If ardent spirit and a solution of salt in water be mixed together, the compound formed is a real chemical union; but if we carefully heat the fluid, the caloric applied will be divided between the three ingredients according to their respective affinities; the union will be broken, for the ardent spirit will first become volatilised, and the union of the salt and water remain unaltered. On increasing the temperature, the water will escape in the form of vapour, and the salt will be left behind.

There are numerous cases in which an increase of temperature is essentially necessary to determine bodies to unite. If pure mercury be exposed to oxygen gas at the common temperature of the atmosphere, the corpuscular attraction subsisting between its particles is sufficient to prevent combination. But if the mercury be heated to a certain degree, the force which kept its particles united will become annihilated, and it then combines with the oxygen which is present.

Again, if the oxide of mercury thus formed be exposed to a higher degree of temperature, the union is demolished, and the quicksilver re-appears in its metallic state.

Hence it is obvious that the action of caloric favours the union of the oxygen and mercury, in consequence of the diminution of the mutual affinity of the parts of the latter: but at length, by augmenting the elastic force of the oxygen, it again breaks the union, or renders the combination impossible.

That increased temperature augments the power of chemical union, the solutions of many salts in the water afford proofs.

A larger quantity of salt is soluble in a given quantity of water at a high, than at a low temperature, and this larger quantity of salt is again separated by cooling.

IV. Chemical affinity is generally accompanied by a change of temperature at the instant of its action: —

When equal parts of concentrated sulphuric acid and ardent spirit are mingled together, the mixture in a few minutes becomes so hot as to render the vessel insupportable to the hands.

If four parts of sulphuric acid of commerce, and one part, by weight, of water, be mixed together, each at the temperature of 50°, the mixture immediately acquires a temperature of about 300°.

All the dense acids, ammonia, and ardent spirit, when mixed with water, have the property of raising its temperature remarkably: and the same is the case when alkalies are introduced into concentrated acids. On the contrary, in many instances cold is produced: —

Take one ounce and a half of muriate of ammonia, and a like quantity of nitrate of potash; reduce each of these salts separately to a powder, and blend them intimately together: having done this, mix them gradually in a glass bason, or other thin glass vessel, with four ounces of water. The result will be, that the cold produced will sink a thermometer immersed in it, to 36° Fahr. A new addition of the same quantity of salts will cool it to 14°, which therefore will freeze water in a glass tube that is immersed in it, without the use of snow or ice. If the water used in a first process be used to reduce other water and salts to the temperature of about 32°, and these be applied to the performance of a second experiment, the temperature may be lowered to 4° below 0°.

A number of experiments have lately been made to produce artificial cold by means of such freezing mixtures. The most complete set of this kind are those of Pepys, Lowitz, and Walker.

V. The chemical affinity between two or more bodies may lie dormant, until it is called into action by the interposition of another body, which frequently exerts no energy upon any of them in a separate state.

From this law originates what was formerly called disposing affinity, or that case in which two or more bodies are incapable of uniting, until the agency is called into action by the addition of a third body, which exerts no sensible affinity upon either of them. This may be proved in the following manner.

Water is a compound of hydrogen and oxygen; phosphorus is a simple body according to our present state of knowledge. If these be presented to each other, no chemical union will take place; but if we add to them an alkali, and then apply heat, the water will become decomposed; that is to say, part of the phosphorus will unite to the oxygen of the water, and form phosphoric acid, and the other part will be dissolved in the hydrogen gas and appear as phosphuretted hydrogen.

Here the alkali acts as the substance requisite to favour the mutual action, or to give the disposing affinity.

If iron and water be brought into contact with each other, no perceptible change will be produced; but if a little sulphuric acid be added to the water and iron, a violent effervescence will take place, the water will become decomposed, hydrogen gas will be evolved, and the iron become dissolved in the acid.

In this case the sulphuric acid is the condition necessary to accelerate the chemical action.

VI. The ratio of the energy of chemical affinity acting between various bodies, is different in different substances.

This is the most important law of chemical attraction. As beginners will find it rather difficult to understand what passes in this more complicated agency, they must remember, that the combination which is effected between two or more bodies by virtue of chemical affinity becomes broken whenever we present to the compound another body, which has an attraction to one of the constituent parts of the compound, superior to that attraction by which they were held together: the bodies, therefore, between which the strongest attraction prevails, combine, and the rest are disengaged, thus:—

If muriatic acid be poured either on pure barytes, or on its carbonate, the barytes will be dissolved, and the compound will be muriate of barytes, which compound is held together by the force of affinity existing between the muriatic acid and the barytes. On letting fall into this solution a few drops of sulphuric acid, an immediate change of principles takes place; the whole quantity of the muriatic acid which was combined with the barytes becomes disengaged, and the sulphuric acid unites to the barytes with a force equal to their affinity, *minus* that of the muriatic acid for the barytes.

Again, if pure silver be dissolved in pure nitric acid, part of this is decomposed to furnish oxygen, to which and the remaining acid the silver will remain united, till another body is presented to it, which has a greater force of attraction to one of the constituent parts of the compound; for instance, if mercury be added to this solution of silver, the mercury will be dissolved, and the silver becomes precipitated or disengaged. The supernatant fluid will then be a *solution of oxide of mercury in nitric acid.*

If to the before-obtained solution, a piece of sheet-lead be presented, the lead will be dissolved, and the mercury become precipitated. The fluid will then be a *solution of oxide of lead in nitric acid.*

If in this solution of lead, a thin slice of copper be suspended, the copper will be dissolved, and the lead will become disengaged. The fluid now is a *solution of oxide of copper in nitric acid.*

If in this solution of copper, a thin sheet of iron be kept immersed, the iron will be dissolved, and the copper become precipitated. The fluid now is a *solution of oxide of iron in nitric acid.*

If to this solution of iron, a piece of zinc be presented, the zinc will be dissolved, and the iron become precipitated. The solution then consists of *zinc, oxygen, and nitric acid.*

If to this solution of oxide of zinc in nitric acid, some ammonia be gradually added, the ammonia will join to the acid, and the oxide of zinc will be precipitated. The solution will then be *nitrate of ammonia.*

If to this solution of nitrate of ammonia, some lime-water be added, the ammonia will become disengaged, (and manifest itself by a pungent odour,) and the solution will be *nitrate of lime.*

If to this solution of nitrate of lime, some oxalic acid be added, the lime will be precipitated by this, and what now remains will be merely *nitric acid.*

We see from these experiments, that different bodies have different degrees of affinity for one and the same substance, which can only be learnt from observation and experiments.

VII. The agency of chemical affinity is either limited or unlimited; in other words, chemical affinity is capable of uniting bodies in definite, or in indefinite proportions:—

Experience has convinced us, that in bodies generally there are certain precise limits of combination beyond which their action cannot pass; it remains still to be ascertained how bodies can combine within these limits.

If we attend to what is known at present, we are forced to acknowledge that this law comprehends several modifications, which may be arranged under the following classes.

1. Chemical affinity unites several bodies, in any proportion whatsoever; their combination is therefore unlimited; for instance,

If water and ardent spirit be mingled together in any quantity, a chemical combination ensues; for the compound obtained has always a specific gravity different from the mean specific gravity of the fluids combined. Its bulk is likewise not the same as that of the fluids in a separate state.

The same is the case when liquid acids and water, or acids and ardent spirit, are combined together.

2. Chemical affinity combines several bodies to a certain extent or *maximum* only.

To this class belong all those bodies which are capable of saturation.

It is on this account that water can only dissolve a certain quantity of salt; ardent spirit a certain quantity of resin, &c.

The union of oxygen and hydrogen in the formation of water, belongs likewise to this class. It will likewise apply to many cases, in which bodies neutralize one another.

If we take a quantity of any of the dense acids diluted with water, for instance, sulphuric acid, and let fall into it a solution of an alkali, for example soda, by a little at a time, and examine the mixture after every addition of the alkali, we find for a considerable time it will exhibit the properties of an acid, it will have a sour taste, and convert vegetable blue colours into red; but if we continue to add greater quantities of soda, these acid properties will gradually diminish, and at last disappear altogether. At that point, neutralization is said to have taken place; if we continue to add more alkali, the mixture will gradually acquire alkaline properties; it will convert blue vegetables into green; it will have an urinous or alkaline taste, &c. These properties will become stronger, the greater the quantity of the soda is, which is added.

But if we proceed to evaporate the solution, in order to obtain crystals, we do not find these containing an indefinite proportion of soda: on the contrary, the salt appears to be truly neutral, and any slight excess of alkali present to be only mechanically mixed. It may be therefore said, that the sulphuric acid is saturated, as well as neutralized by soda. But the converse will not hold good, because a salt may be formed of the same ingredients, containing a considerable excess of acid, called therefore supersulphate of soda.

Again, take muriatic acid, and let fall into it gradually carbonate of lime, or magnesia; an effervescence will take place, for a chemical union ensues between the acid and the lime, or magnesia, while the carbonic acid, the other constituent of these bodies, becomes disengaged. But if we continue the addition of the carbonate of lime, or magnesia, until it produces no further effervescence; no chemical union will be obtained on adding more; this will fall to the bottom unaltered, for the combination is at its *maximum*.

3. Chemical affinity is capable of uniting some bodies in one proportion only; thus hydrogen and oxygen are known to form but one compound, namely water; whereas it combines other bodies in two, three, or more proportions; each of these combinations produces compounds, possessing peculiar properties.

This peculiarity of combination is highly important.

It is owing to this circumstance that both nature and art produce substances of the same principles, only combined in different proportions, which possess peculiar properties, widely different from each other. This is illustrated in the case of sulphuric acid and soda already noticed.

Another instance of this law may be seen in the following experiment:

Introduce one ounce of copper filings into four ounces of muriatic acid, contained in a medicine-phial of eight ounces capacity, cork it well, and let it stand undisturbed; the acid will soon acquire a greenish colour, which becomes deeper in proportion as the copper becomes dissolved; but in a few days, if the bottle be now and then agitated, the colour vanishes, and the solution at last becomes colourless.

If we now invert the bottle in mercury or water, and remove the cork under that fluid, a quantity of the mercury will rush in: an evident proof that part of the air contained in the phial has disappeared.

If we examine the remaining air, we shall find that it is incapable of supporting flame, and that it is nearly deprived of all its oxygen. If we now open the phial, the solution becomes again green.

The *rationale* of these phenomena is this: The quantity of oxygen which is present in the confined quantity of air in the empty part of the phial, combines with the copper to a certain degree, which then becomes soluble in the acid, and exhibits the green solution.

This oxide is gradually decomposed to a certain extent by some of the remaining copper, more of which is thus dissolved, and the solution becomes colourless. If more oxygen be admitted, the solution becomes green again as before.

4. In the formation of similar intimate chemical combinations, the same quantity of a given substance appears always requisite; and where there are different compounds of the same ingredients, if all contain the same quantity of one, the relative proportions of the other may be expressed by some of the small whole numbers, 1, 2, 3, 4, &c. Thus, if such quantities of potash and of soda be taken, as will both neutralize the same weight of sulphuric acid, each will also neutralize the same weight of nitric acid as the other. Hence the salts formed by the mutual decomposition of neutral salts are likewise neutral. This important law was first announced by Dr. Richter, in 1792. He also pointed out, that in the precipitation of metals by each other, the whole of the oxygen and acid are transferred; and that if the original solution were neutral, the new one is so likewise. Mr. Dalton, of Manchester, about the year 1802, adopted the opinion, that in these intimate compounds every particle of the one ingredient united to a corresponding particle of the other, or to some small number of particles.

The simplicity and beauty of this, which has been called the atomic theory, made a speedy and strong impression on chemists in general. Dr. Wollaston found it agree very well with the analyses of different salts, formed of the same acid and alkali. He took, for instance, equal weights of carbonate of potash, reduced one portion to subcarbonate by heating it to redness, then introducing them separately over mercury, and letting up diluted sulphuric acid to each, found the quantity of carbonic acid expelled from the subcarbonate exactly one half of that from the carbonate. Gay-Lussac, in 1808, first maintained, that gases unite in simple ratios of their volume, and where the compound is gaseous, that the condensation, if any, is also in a simple ratio. Thus 1 measure of oxygen unites with 2 of hydrogen to form water; 1 measure of nitrogen with 3 of hydrogen to form 2 measures of ammonia; equal measures of ammonia and muriatic acid to form muriate of ammonia. It appears too in many instances that a solid combining with a gas does not alter its volume, as when charcoal uniting to oxygen forms carbonic acid gas. Berzelius, Sir Humphrey Davy, and many other chemists, have since adduced numerous proofs of the correctness of the atomic theory: but from the difficulty of analysing bodies with sufficient precision, and still more from the readiness with which the ingredients often combine with each other, or with the resulting compounds, less intimately, and therefore in indeterminate proportions, it can hardly be expected that it should be established universally.

VIII. The energy of the chemical affinity of different bodies is modified in proportion to the ponderable quantities of the substances placed within the sphere of action.

It is obvious, from this, that the denomination of elective affinity is erroneous; since it supposes the union of one entire substance with another, to the exclusion of a third. But this is not the case; a mere division of action takes place in instances of this kind; that is to say, the substances act according to the quantity existing within the sphere of activity. The excess of quantity is capable of compensating the deficiency of the force of affinity. When, therefore, a compound body of two substances is acted on by a third, that part of the compound which is the subject of combination, is divided between the two remaining, not only in proportion to their respective degrees of affinity, but also according to their ponderable quantities, so that by varying this in either, the effect produced will be varied.

Thus Berthollet has proved, that in all cases a large quantity of a body is capable of abstracting a portion of another, from a small portion of a third, how weak soever the affinity between the first and second of these bodies may be, and how strong soever the affinity between the second and third. Thus potash is capable of abstracting part of the acid from oxalate of lime, phosphate of lime, and carbonate of lime. Soda and lime decompose partially sulphate of potash. Nitric acid subtracts part of the base from oxalate of lime, &c.

The following experiment, advanced by Berthollet, will prove this more clearly.

If equal parts, by weight, of potash and sulphate of barytes be boiled, in a small quantity of water, to dryness, it will be found that the sulphuric acid has been divided between the two bases in the compound ratio of their mass, and their force of affinity. The greater part of the sulphate of barytes will be found undecomposed; a small quantity of barytes will be found at liberty; most of the potash will also be uncombined, but a certain portion will be united with the sulphuric acid which the barytes has lost, in the form of sulphate of potash.

It is not merely in the instance stated here, that this division of one body between two others, according to their respective masses and affinities, takes place, there being scarcely any example to the contrary.

And as the affinities of bodies vary with their masses, it is obvious that, when we speak of the affinities of bodies, we ought to consider them as always acting in certain determinate proportions.

Aua'nte. (From αυαινω, to dry.) A dry disease, proceeding from a fermentation in the stomach, described by Hippocrates de Morbis.

Aua'pse. The same.

Au'chen. (From αυχεω, to be proud.) The neck, which, in the posture of pride, is made stiff and erect.

Auditory nerve. See *Nerve* and *Portio mollis.*

Auditory passage. See *Ear* and *Meatus auditorius internus.*

Augu'stum. An epithet given to several compound medicines.

Auli'scos. (From αυλος, a pipe.) A catheter, or clyster-pipe.

Au'los. The same.

AU'RA. (From αω, to breathe.) Any subtile vapour, or exhalation.

AU'RA EPILE'PTICA. A sensation which is felt by epileptic patients, as if a blast of cold air ascended from the lower parts towards the heart and head.

AU'RA SE'MINIS. The extremely subtile and vivifying portion of the semen virile, that ascends through the Fallopian tubes, to impregnate the ovum in the ovarium.

Au'ra vita'lis. So Helmont calls the vital heat.

Aura'ntia curassave'ntia. Curassoa, or Curassao apples, or oranges. The fruit so called seem to be the immature oranges, that by some accident have been checked in their growth. They are a grateful aromatic bitter, of a flavour very different from that of the peel of the ripe fruit, and without any acid; what little tartness they have when fresh, is lost in drying. Infused in wine, or brandy, they afford a good bitter for the stomach. They are used to promote the discharge in issues, whence their name of *issue peas*, and to give the flavour of hops to beer.

Aura'ntii ba'ccæ. Seville oranges. See *Citrus aurantium.*

Aura'ntii cortex. See *Citrus aurantium.*

AURA'NTIUM. (So called, *ab aureo colore*, from its golden colour, or from *Arantium*, a town of Achaia.) See *Citrus aurantium.*

AURI'CULA. (dim. of *auris*, the ear.) The external ear, upon which are several eminences and depressions, as the *helix*, *antihelix*, *tragus*, *antitragus*, *conchæ auriculæ*, *scapha*, and *lobulus*. See *Ear.*

Auri'cula judæ. Jew's ear. See *Peziza auricula.*

Auri′cula mu′ris. See *Hieracium.*

Auri′culæ co′rdis. The auricles of the heart. See *Heart.*

AURICULA′RIS. (*Auricularis,* sc. *digitus;* from *auris,* the ear; so called because people generally put it into the ear, when the hearing is obstructed.) The little finger.

Auri′ga. (A waggoner. Lat.) A bandage for the sides is so called because it is made like the traces of a waggon-horse. *Galen.*

Auri′go. (*Ab aureo colore;* from its yellow colour.) The jaundice. See *Icterus.*

Auripi′gmentum. (From *aurum,* gold, and *pigmentum,* paint; so called from its colour and its use to painters.) Yellow orpiment. See *Arsenic.*

AU′RIS. (From *aura,* air, as being the medium of hearing.) The ear, or organ of hearing. See *Ear.*

Au′ris leva′tor. See *Attollens aurem.*

Aurisca′lpium. (From *auris,* the ear, and *scalpo,* to scrape.) An instrument for cleansing the ear.

Au′rium so′rdes. The wax of the ears.

Au′rium tinni′tus. A ringing noise in the ears.

Auru′go. The jaundice.

AU′RUM. Gold.

Au′rum horizonta′le. Oil of cinnamon and sugar.

Au′rum lepro′sum. Antimony.

Au′rum musi′vum. A preparation of tin, sulphur, sal-ammoniac, and quicksilver.

Au′rum pota′bile. Gold dissolved and mixed with oil of rosemary, to be drank.

Au′rus Brazilie′nsis. An obsolete name of the Calamus aromaticus.

Authe′meron. (From *αυτος,* the same, and *ημερα,* a day.) A medicine which gives relief, or is to be administered the same day.

Autolitho′tomus. One who cuts himself for the stone.

Autocrate′ia. The healing power of nature. *Hippocrates.*

Auto′psia. (From *αυτος,* himself, and *οπ]ομαι,* to see.) Ocular evidence.

Auto′pyros. (From *αυτος,* itself, and *ϖυρος,* wheat.) Bread made with the meal of wheat, from which the bran has not been removed. *Galen.*

Auxilia′rii mu′sculi. The pyramidal muscles of the abdomen.

Ava′nsis. *Avante.* Indigestion.

AVELLA′NA. (From *Abella,* or *Avella,* a town in Campania, where they grew.) The hazel-nut.

Avella′na catha′rtica. Barbadoes nuts. A purgative.

Avella′na Mexicana. Cocoa and chocolate nut.

Avella′na purga′trix. Garden spurge.

AVE′NA. (From *aveo,* to covet; because cattle are so fond of it.) The oat.

1. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Digynia.*

2. The pharmacopœial name of the oat.

Ave′na sati′va. The systematic name for the *avena* of the pharmacopœias. It is the seed which is commonly used, and called the oat. There are two kinds of oats: the black and the white. They have similar virtues, but the black are chiefly sown for horses. They are less farinaceous, and less nourishing, than rice, or wheat; yet afford a sufficient nourishment, of easy digestion, to such as feed constantly on them. In Scotland, and some of the Northern counties of England, oats form the chief bread of the inhabitants. They are much used in Germany; but, in Norway, oat bread is a luxury, among the common people. Gruels, made with the flour, or meal, called oatmeal, digest easily, have a soft mucilaginous quality, by which they obtund acrimony, and are used for common drink and food in fevers, inflammatory disorders, coughs, hoarseness, roughness, and exulceration of the fauces; and water-gruels answer all the purposes of Hippocrates' ptisan. Externally, poultices, with oatmeal, vinegar, and a very little oil, are good for sprains and bruises. Stimulant poultices, with the grounds of strong beer, mixed up with oatmeal, are made for tumours, &c. of a gangrenous tendency.

Ave′næ se′mina. See *Avena sativa.*

Avenacu. A Molucca tree, of a caustic quality.

Avens, common. See *Geum.*

AVENZOAR, a native of Seville, in Spain, who flourished about the beginning of the twelfth century; he was made physician to the king, and is said, but on imperfect evidence, to have attained the uncommon age of 135. He prepared his own medicines, and practised surgery, as well as physic. His principal work was a compendium of the practice of medicine, called "Al Theiser," containing some diseases not elsewhere described, and numerous cases candidly related. He was called the Experimenter, from his careful investigation of the powers of medicines by actual trial.

AVERROES, an eminent philosopher and physician, born about the middle of the 12th century, at Corduba, in Spain. He studied medicine under Avenzoar, but does not appear to have been much engaged in the practice of it, his life exhibiting the most extraordinary vicissitudes of honours bestowed upon him as a magistrate, and persecutions, which he underwent for religion. He appears to have first observed, that the small-pox occurs but once in the same person. His principal medical work, called the "Universal," is a compendium of physic, mostly collected from other authors. He died about the year 1206.

AVICENNA, a celebrated philosopher and physician, born in Chorasan, in the year 980. He studied at Bagdat, obtained a degree, and began to practise at 18: and he soon attained great wealth and honour in the court of the caliph. But during the latter part of his life residing at Ispahan, after several years spent in travelling, he impaired his constitution by intemperance, and died of a dysentery in his 58th year. His chief work on medicine, called "Canon Medicinæ," though mostly borrowed from the Greek or other preceding writers, and in a very diffuse style, acquired great reputation, and was taught in the European colleges till near the middle of the 17th century.

AVICE′NNIA. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Angiospermia.*

Avicenni′a tomento′sa. The systematic name for the plant which affords the Malacca bean, or *Anacardium orientale* of the pharmacopœias. The fruit, or nut, so called, is of a shining black colour, heart-shaped, compressed, and about the size of the thumb-nail. It is the produce of the *Avicennia tomentosa; foliis cordato-ovatis, subtus tomentosis,* of Linnæus. It is now deservedly forgot in this country.

Avigato Pear. See *Laurus persea.*

AXI′LLA. (*Axilla, atzil,* Heb. Scaliger deduces it from *ago,* to act; in this manner, ago, axo, axa, axula, axilla.) The cavity under the upper part of the arm, called the arm-pit.

Axillary arteries. *Arteriæ axillares.* The axillary arteries are continuations of the subclavians, and give off, each of them, in the axilla, four mammary arteries, the subscapular, and the posterior and anterior circumflex arteries, which ramify about the joint.

Axillary nerve. Articular nerve. A branch of the brachial plexus, and sometimes of the radial nerve. It runs outwards and backwards, around the neck of the humerus, and is lost in the muscles of the scapula.

Axillary veins. *Venæ axillares.* The axillary veins receive the blood from the veins of the arm, and evacuate it into the subclavian vein.

A′xis. (From *ago,* to act.) See *Dentatus.*

AXU′NGIA. (From *axis,* an axle-tree, and *unguo,* to anoint.) Hog's lard.

Axu′ngia cura′ta. Purified hog's lard.

Axu′ngia de mu′mmia. Marrow.

A′zac. (Arab.) Gum ammoniac.

Aza′gor. Verdigrise.

Azamar. Native cinnabar. Vermilion.

Azed. A fine kind of camphire.

AZOT. (From α, priv. and ζεω, to live; because it is unfit for respiration.) See *Nitrogen.*

Azot, gaseous oxide of. See *Nitrogen, gaseous oxide of.*

A′zoth. An imaginary universal remedy.

A′zub. Alum.

Azu′rium. Quicksilver, sulphur, and sal-ammoniac.

A′zyges. (From α, priv. and ζυγος, a yoke.) The os sphenoides was so called, because it has no fellow.

A′ZYGOS. (From α, priv. and ζυγος, a yoke; because it has no fellow.) Several single muscles, veins, bones, &c. are so called.

A′zygos morga′gni. A muscle of the mouth.

A′zygos proce′ssus. A process of the os sphenoides.

A′ZYGOS U′VULÆ. *Palato-staphilinus* of Douglas. *Staphilinus,* or *Epistaphilinus* of Winslow. A muscle of the uvula, which arises at one extremity of the suture which joins the palate bones, runs down the whole length of the velum and uvula, resembling an earth-worm, and adhering to the tendons of the circumflexi. It is inserted into the tip of the uvula. Its use is to raise the uvula upwards and forwards, and to shorten it.

A′zygos vein. *Vena azygos. Vena sine pari.* This vein is situated in the right cavity of the thorax, upon the dorsal vertebræ. It receives the blood from the vertebral, intercostal, bronchial, pericardiac, and diaphragmatic veins, and evacuates it into the vena cava superior.

B.

Babuzica′rius. (From βαβαζω, to speak inarticulately.) The incubus, or nightmare; so called because, in this disorder, the person is apt to make an inarticulate and confused noise.

Ba′cca monspelie′nsis. *Inula dysenterica.*

Bacca′lia. (*à baccharum copiâ,* because it abounds in berries.) The bay, or laurel-tree.

Ba′ccæ bermude′nses. See *Sapindus saponaria.*

Ba′ccæ juni′peri. Juniper berries. See *Juniperus.*

Ba′ccæ lau′ri. Laurel berries. See *Laurus.*

Ba′ccæ norla′ndicæ. See *Rubus Arcticus.*

Ba′ccæ piscato′riæ. See *Menispermum cocculus.*

Ba′ccharis. (From *bacchus*, wine; from its fragrance resembling that liquor.) See *Inula dysenterica.*

Bacher's pills. *Pilulæ tonicæ Bacheri.* A celebrated medicine in France, employed for the cure of dropsies. Their principal ingredient is the extract of melampodium, or black hellebore.

Ba′cchia. (From *bacchus*, wine; because it generally proceeds from hard drinking and intemperance.) *Gutta rosacea.* A name given by Linnæus to a pimpled face.

BACCIUS, Andrew, a native of Ancona, practised medicine at Rome towards the end of the 16th century, and became physician to Pope Sixtus V. He appears to have had great industry and learning from his numerous publications; of which the chief, "De Thermis," gives an extensive examination of natural waters.

Ba′cculi. Is used, by some writers, for a particular kind of lozenges, shaped into little short rolls. Hildanus likewise uses it for an instrument in surgery.

Ba′coba. The *Banana.*

BACTISHUA, George, was a celebrated physician of Chorasan, distinguished also for his literary attainments. He was successful in curing the reigning caliph of a complaint of the stomach, which brought him into great honour; he translated several of the ancient medical authors into the Arabian language; and many of his observations are recorded by Rhazes and other succeeding physicians. His son, *Gabriel*, was in equal estimation with the famous Haroun Al Raschid, whom he cured of apoplexy by blood-letting, in opposition to the opinion of the other physicians.

Badia′ga. A kind of sponge usually sold in Russia, the powder of which is said to take away the livid marks of blows and bruises within a few hours. It is only described by Bauxbaum, and its nature is not properly understood.

Badian se′men. The seed of a tree which grows in China, and smells like aniseed. The Chinese (and Dutch, in imitation of them) sometimes use the badiane to give their tea an aromatic taste. See *Illicium anisatum.*

Badi′za a′qua. See *Bath waters.*

Badranum semen. Indian aniseed.

Badu′cca. (Indian.) A species of capparis.

Ba′dzcher. An antidote.

Bæ′os. (Βαιος.) In Hippocrates it means few; but in P. Ægineta, it is an epithet for a poultice.

BAGLIVI, George, born at Ragusa in 1668, after graduating at Padua, and improving himself greatly by travelling throughout Italy, was made professor of medicine and anatomy at Rome. In 1696, he published an excellent work on the practice of physic, condemning the exclusive attachment to theory, and earnestly recommending the Hippocratic method of observation; which, he maintained, assisted by the modern improvements in anatomy and physiology, would tend greatly to the advancement of medicine. He has left also several other tracts, though he died at the early age of 38.

BAGNIGGE WELLS. A saline mineral spring in London, resembling the Epsom water. In most constitutions, three half-pints is considered a full dose for purging.

Ba′gnio. (From *bagno*, Ital.) A bathing or sweating-house.

Ba′hei coyo′lli. Ray takes it to be the *Areca*, or *Faufel.*

Ba′hel schu′lli. An Indian-tree. See *Genista.*

Ba′iac. White lead.

BAILLOU, Guillaume de, commonly called *Ballonius*, was born in 1538 at Paris, where he graduated, and attained considerable eminence. He was very active in the contest for precedence between the physicians and surgeons, which was at length decided in favour of the former. His writings are numerous, though not now much esteemed; but he appears to have been the first who properly discriminated between gout and rheumatism.

Ba′la. The plantain-tree.

Balæ′na macroce′phala. (Βαλαινα: from *βαλλω*, to cast, from its power in casting up water; and *μακροκεφαλος*: from *μακρος*, long, and *κεφαλη*, a head; from the length of its head.) The systematic name of a species of whale.

Balani′num o′leum. Oil of the ben-nut.

Balanoca′stanum. (From *βαλανος*, a nut, and *καϛανον*, a chesnut; so called from its tuberous root.) The *bunium bulbocastanum*, or earth-nut: which see.

Ba′lanos. *Balanus.* (From *βαλλω*, to cast; because it sheds its fruit upon the ground.) 1. An acorn.

2. Hippocrates, in his Treatise de Affectionibus, expresses by it the oak.

3. Theophrastus uses it sometimes, to express any glandiferous tree.

4. From the similitude of form, this word is used to express suppositories and pessaries.

5. A name of the glans penis.

BALAU′STIUM. (From *βαλιος*, various, and *αυω*, to dry; so called from the variety of its colours, and its becoming soon dry; or from *βλαϛανω*, to germinate.)

Balaustia. A large rose-like flower, of a red colour, the produce of the plant from which we obtain the granatum. See *Punica granatum.*

BALBU'TIES, (From βαϐαζω, to stammer; or from *balbel,* Heb. to stammer.) A defect of speech; properly, that sort of stammering where the patient sometimes hesitates, and immediately after, speaks precipitately. It is the *Psellismus Balbutiens* of Cullen.

Bali'sta. (From βαλλω, to cast.) The astragulus, a bone of the foot, was formerly called os balistæ, because the antients used to cast it from their slings.

Balloo'n. (*Ballon,* or *balon,* French.) A large glass receiver in the form of a hollow globe. For certain chemical operations *balloons* are made with two necks, placed opposite to each other; one to receive the neck of a retort, and the other to enter the neck of a second *balloon:* this apparatus is called *enfiladed balloons.* Their use is to increase the whole space of the receiver, because any number of these may be adjusted to each other. The only one of these vessels which is generally used, is a small oblong *balloon* with two necks, which is to be luted to the retort, and to the receiver, or great *balloon;* it serves to remove this receiver from the body of the furnace, and to hinder it from being too much heated.

Ballo'te. (From βαλλω, to send forth, and ους, ωτος, the ear; because it sends forth flowers like ears.) *Ballota.* Stinking horehound. A nettle-like plant. The *ballote nigra* of Linnæus.

Balm. See *Melissa.*

Balm of Gilead. See *Dracocephalum.*

Balm of Mecca. See *Amyris opobalsamum.*

Balm, Turkey. See *Dracocephalum.*

Balmoney. See *Æthusa meum.*

BA'LNEUM. A bath, or bathing-house. See *Bath.*

Ba'lneum anima'le. The wrapping any part of an animal, just killed, round the body, or a limb.

BA'LNEUM ARE'NÆ. A sand-bath for chemical purposes. See *Bath.*

BA'LNEUM CA'LIDUM. A hot-bath. See *Bath.*

BA'LNEUM FRI'GIDUM. A cold bath. See *Bath.*

BA'LNEUM MARI'Æ. *Balneum maris.* A warm-water bath. See *Bath.*

BA'LNEUM MEDICA'TUM. A bath impregnated with drugs.

Ba'lneum si'ccum. *Balneum cinereum.* A dry bath, either with ashes, sand, or iron filings.

Ba'lneum sulphu'reum. A sulphurous bath.

BA'LNEUM TE'PIDUM. A tepid bath. See *Bath.*

BA'LNEUM VAPO'RIS. A vapour bath.

BA'LSAM. (*Balsamum.* From *baal samen,* Hebrew.) The term balsam was antiently applied to any strong-scented, natural vegetable resin of about the fluidity of treacle, inflammable, not miscible with water, without addition, and supposed to be possessed of many medical virtues. All the turpentines, the Peruvian balsam, copaiba balsam, &c. are examples of natural balsams. Besides, many medicines compounded of various resins, or oils, and brought to this consistence, obtained the name of balsam. Latterly, however, the term has been restricted to those resins which contain the Benzoic acid. Of these only four are commonly known, the gum benzoin, balsam of Tolu, that of Peru, and storax.

Balsam apple, male. The fruit of the *Momordica elaterium* of Linnæus. See *Momordica elaterium.*

Balsam, artificial. Compound medicines are thus termed which are made of a balsamic consistence and fragrance. They are generally composed of expressed or ethereal oils, resins, and other solid bodies, which give them the consistence of butter. The basis, or body of them, is expressed oil of nutmeg, and frequently wax, butter, &c. They are usually tinged with cinnabar and saffron.

Balsam, Canary. See *Dracocephalum.*

Balsam of Canada. See *Pinus Balsamea.*

Balsam of Copaiba. See *Copaifera officinalis.*

Balsam, natural. A resin which has not yet assumed the concrete form, but still continues in a fluid state, is so called, as common turpentine, balsamum copaiva, peruvianum, tolutanum, &c.

Balsam, Peruvian. See *Myroxylon Peruiferum.*

Balsam of sulphur. See *Balsamum sulphuris.*

Balsam of Tolu. See *Toluifera balsamum.*

Balsam, Turkey. See *Dracocephalum.*

Balsama'tio. (From *balsamum,* a balsam.) The embalming of dead bodies.

Balsa'mea. (From *balsamum,* balsam.) The balm of Gilead fir; so called from its odour. See *Pinus balsamea.*

Balsamelæ'on. (From *balsamum,* balsam, and ελαιον, oil.) Balm of Gilead, or true balsamum Judaicum.

Ba'lsami o'leum. Balm of Gilead.

BALSA'MICA. (*Balsamica,* sc. *medicamenta;* from ϐαλσαμον, balsam.) Balsamics. A term generally applied to substances of a smooth and oily consistence, which possess emollient, sweet, and generally aromatic qualities. Hoffman calls those medicines by this name, which are hot and acrid, and also the natural balsams, stimulating gums, &c. by which the vital heat is increased. Dr. Cullen speaks of them under the joint title of *balsamica* et *resinosa*, considering that turpentine is the basis of all balsams.

Balsami'fera Brazilie'nsis. The balsam copaiba tree.

Balsami'fera Indica'na. The Peruvian balsam tree.

Balsami'ta fœmi'nea. See *Achillea ageratum*.

Balsami'ta lu'tea. The *polygonum persicaria* of Linnæus; which see.

Balsami'ta mi'nor. Sweet maudlin.

Balsami'ta major. } See *Tanacetum Balsamita*.
Balsami'ta mas. }

BA'LSAMUM. (From *baal samen*, Heb. the prince of oils.) A balsam. See *Balsam*.

Ba'lsamum Ægypti'acum. See *Amyris opobalsamum*.

Ba'lsamum America'num. See *Myroxylon Peruiferum*.

Ba'lsamum ano'dynum. A preparation made from tacamahacca, distilled with turpentine and soap liniment, and tincture of opium.

Ba'lsamum alpi'num. See *Amyris opobalsamum*.

Ba'lsamum antimo'nii. A remedy formerly applied to cancer.

Ba'lsamum arcæ'i. A preparation composed of gum-elemi and suet.

Ba'lsamum Asia'ticum. See *Amyris opobalsamum*.

Ba'lsamum Brazilie'nse. See *Pinus balsamea*.

Ba'lsamum Canade'nse. See *Pinus balsamea*.

Ba'lsamum cepha'licum. A distillation of oils, nutmeg, cloves, amber, &c.

Ba'lsamum commendato'ris. A composition of storax, benzoe, myrrh, aloes, &c.

Ba'lsamum Copa'ibæ. See *Copaifera officinalis*.

Ba'lsamum embryonum. A preparation of aniseed.

Ba'lsamum genui'num antiquo'rum. See *Amyris opobalsamum*.

Ba'lsamum Gileade'nse. See *Amyris opobalsamum*.

Ba'lsamum guaia'cinum. Balsam of Peru and spirits of wine.

Ba'lsamum Guido'nis. The same as balsamum anodynum.

Ba'lsamum Hunga'ricum. A balsam prepared from a coniferous tree on the Carpathian mountains.

Ba'lsamum Juda'icum. See *Amyris opobalsamum*.

Ba'lsamum Locate'lli. (*Locatelli*; so called from its inventor Lucatellus.) *Balsamum Lucatelli*. A preparation made of oil, turpentine, wax, and red saunders; now disused; formerly exhibited in coughs of long standing.

Ba'lsamum mas. The herb costmary. See *Tanacetum balsamita*.

Ba'lsamum e Me'cca. See *Amyris opobalsamum*.

Ba'lsamum Mexica'num. See *Myroxylon Peruiferum*.

Ba'lsamum no'vum. A new balsam from a red fruit in the West Indies.

Ba'lsamum odori'ferum. A preparation of oil, wax, and any essential oil.

Ba'lsamum Pe'rsicum. A balsamum composed of storax, benzoe, myrrh, and aloes.

Ba'lsamum Peruvia'num. See *Myroxylon peruiferum*.

Ba'lsamum rackasira. This balsam, which is inodorous when cold, but of a smell approaching to that of Tolu balsam when heated, is brought from India in gourd-shells. It is slightly bitter to the taste, and adheres to the teeth, on chewing. It is supposed to be one of the factitious balsams, and is scarcely ever prescribed in this country.

Ba'lsamum sa'mech. A factitious balsam, composed of tartar, dulcified by spirits of wine.

Ba'lsamum sapona'ceum. A name given to the preparation called opodeldoc.

Ba'lsamum satu'rni. The remedy so named is prepared by dissolving the acetate of lead in oil of turpentine, and digesting the mixture till it acquires a red colour. This is found to be a good remedy for cleansing foul ulcers; but it is not acknowledged in our dispensatories.

Ba'lsamum sty'racis Benzoi'ni. Gum-benzoin is so called. See *Styrax Benzoin*.

Ba'lsamum su'ccini. Oil of amber.

Ba'lsamum su'lphuris. A solution of sulphur in oil.

Ba'lsamum su'lphuris anisa'tum. Terebinthinated balsam of sulphur, and oil of aniseed.

Ba'lsamum su'lphuris Barbade'nse. Sulphur boiled with Barbadoes tar.

Ba'lsamum su'lphuris cra'ssum. Thick balsam of sulphur.

Ba'lsamum su'lphuris terebinthina'tum. This is made by digesting the sulphur with oil of turpentine; it is now confined to veterinary medicine.

Ba'lsamum su'lphuris si'mplex. Sulphur boiled with oil.

Ba'lsamum Syri'acum. The balm of Gilead. See *Amyris opobalsamum*.

Ba'lsamum Toluta'num. See *Toluifera balsamum*.

Ba'lsamum trauma'ticum. Vulnerary balsam. A form of medicine prescribed in the London Dispensatory, intended to supply the place of the tincture commonly called Friar's balsam, so famous for curing old ulcers. The London College have named it Tinctura Benzoini composita.

Ba'lsamum universa'le. A name given to the unguentum saturninum of old pharmacopœias.

Ba'lsamum ve'rum. See *Amyris opobalsamum*.

Ba'lsamum vi'ride. Linseed-oil, turpentine, and verdigrise mixed together.

Ba'lsamum vi'tæ Hoffma'nni. *Beaume de vie.* An artificial balsam, so named from its inventor, and composed of a great variety of the warmest and most grateful essential oils, such as nutmegs, cloves, lavender, &c. with balsam of Peru, dissolved in highly rectified spirit of wine; but it is now greatly abridged in the number of ingredients, and but little used.

Balzoi'num. The gum-benjamin.

Bamba'lio. (From βαμβαινω, to speak inarticulately.) A person who stammers, or lisps.

Bambo'o. (Indian.) The young shoots of the *arundo bambos* of Linnæus, which are prepared by the natives of both Indies with vinegar, garlic, pepper, &c. into a very excellent pickle, which promotes the appetite, and assists digestion.

Ba'mia moscha'ta. See *Hibiscus.*

Bamier. The name of a plant common in Egypt, the husk of which they dress with meat, and, from its agreeable flavour, make great use of it in their ragouts.

Ban a'rbor. The coffee-tree.

BANA'NA. (Indian.) *Bananeira. Ficoides. Ficus Indica. Musa fructu cucumerino breviori. Senoria. Pacœira.* The Banana, or Plantain-tree. The most remarkable species of this genus of plants are,

1. The *paradisaica*, or plantain.
2. The *musa sapientum*, or banana-tree.

Both are among the most important productions of the earth. The first sort is cultivated in all the islands of the West Indies, where the fruit serves the Indians for bread; and some of the white people also prefer it to most other things, especially to the yams and cassada bread. This tree is cultivated, on a very extensive scale, in Jamaica; without the fruit of which, Dr. Wright says, the island would scarcely be habitable, as no species of provision would supply their place. Even flour, or bread itself, would be less agreeable, and less able to support the laborious negro, so as to enable him to do his business, or to keep in health. Plantains also fatten horses, cattle, swine, dogs, fowls, and other domestic animals. The leaves, being smooth and soft, are employed as dressings after blisters. The water from the soft trunk is astringent, and employed by some to check diarrhœas. Every other part of the tree is useful in different parts of rural economy. The leaves are used as napkins and tablecloths, and are food for hogs. The second sort, musa sapientum, or banana tree, differs from the paradisaica, in having its stalks marked with dark purple stripes and spots. The fruit is shorter, straighter, and rounder; the pulp is softer, and of a more luscious taste. It is never eaten green; but, when ripe, it is very agreeable, either eaten raw or fried in slices, as fritters, and is relished by all ranks of people in the West Indies. Both the above plants were carried to the West Indies from the Canary islands; whither, it is believed, they had been brought from Guinea, where they grow naturally.

Bananei'ra. See *Banana.*

Ba'ncia. The Elaphoboscum, or wild parsnip.

BANDAGE. *Deligatio. Fascia.* An apparatus consisting of one or several pieces of linen, or flannel, and intended for covering or surrounding parts of the body for surgical purposes. Bandages are either simple or compound. The chief of the simple are the circular, the spiral, the uniting, the retaining, the expellent, and the creeping. The compound bandages used in surgery, are the T bandage, the suspensory one, the capistrum, the eighteen-tail bandage, and others, to be met with in surgical treatises.

Bandu'ra. A plant which grows in Ceylon, whose root is said to be astringent.

Bangu'e. *Bange.* A species of opiate in great use throughout the East, for its intoxicating qualities. It is the leaf of a kind of wild hemp, growing in the countries of the Levant, and made into powder, pills, or conserves.

Ba'nica. The wild parsnip.

Bani'lia.
Bani'las. } See *Epidendrum.*

Bao'bab. *Bahobab.* A species of the genus of plants called by Linnæus *Adansonia:* which see.

Ba'ptica co'ccus. Kermes berries.

Baptiste'rium. (From βαπτω, to immerge.) A bath, or repository of water, to wash the body.

Bapti'strum. (From βαπτω, to dye.) A species of wild mustard, so called from its reddish colour.

Ba'rac. (From *borak,* Arabian, splendid.) *Barach panis.* Nitre. According to Rulandus, nitrum salis.

Ba'ras. (Arabian.) In M. A. Severinus, it is synonymous with Alphus, or Leuce.

Bara'thrum. (Arabian.) Any cavity or hollow place.

BA'RBA. (From *barbarus,* because wild nations are usually unshaven.) 1. The beard of man.

2. Some vegetables have the specific name of *barba,* whose ramifications are bushy, like a beard, as *barba jovis,* &c.

Ba'rba aro'nis. The arum.

Ba'rba ca'præ. The ulmaria.

Ba'rba hi'rci. The tragopogon.

Ba'rba jo'vis. Jupiter's beard, or the silver bush. Also a name of the sempervivum majus, and of a species of anthyllis.

Barba'does che'rry. The fruit of the *malphigia glabra* of Linnæus, resembling the inferior sorts of our cherries.

Barbádoes nut. See *Jatropha curcas.*

BARBA'DOES TAR. (So named from the island from which it is chiefly procured.) The use of this article in medicine is limited to its external application, at times, in paralytic cases.

Barba'rea. (From St. Barbary, who is said to have found its virtues.) See *Erysimum barbarea.*

Barba'ria. *Barbaricum.* An obsolete term formerly applied to rhubarb.

Barbaro'ssæ pi'lula. Barbarossa's pill. An ancient composition of quicksilver, rhubarb, diagridium, musk, amber, &c. It was the first internal mercurial medicine which obtained any real credit.

Ba'rbarum. The name of a plaster in Scribonius Largus.

Barbatina. A Persian vermifuge seed.

Ba'rbel. *Barbo.* An oblong fish, resembling the pike, the eating of whose roe often brings on the cholera.

Barberry. See *Berberis.*

BARBEYRAC, Charles, a French physician of the 17th century, who graduated and settled at Montpelier, where he acquired great celebrity. He died in 1699, at the age of about 70, having published little, except a good account of the diseases of the chest and stomach in females. Mr. Locke, who became intimate with him abroad, considered him very similar in his manners and opinions to Sydenham. His practice is said to have been distinguished for simplicity and energy.

Barbo'ta. The barbut. A small river-fish. It is remarkable for the size of its liver, which is esteemed the most delicate part of it.

BARDA'NA. (From *bardus,* foolish; because silly people are apt to throw them on the garments of passengers, having the property of sticking to whatever they touch.) Burdock. See *Arctium.*

BARE'GE WATER. The small village of Barege, celebrated for its thermal waters, is situated on the French side of the Pyrenees, about half way between the Mediterranean and the Bay of Biscay. The hot springs are four in number. They have all the same component parts, but differ somewhat in their temperature, and in the quantity of sulphur, the hottest being most strongly penetrated with this active ingredient. The coolest of these waters raises Fahrenheit's thermometer to 73 deg.; the hottest to 120 deg. Barege waters are remarkable for a very smooth soapy feel; they render the skin very supple and pliable, and dissolve perfectly well soap and animal lymph; and are resorted to as a bath in resolving tumours of various kinds, rigidities, and contractions of the tendons, stiffness of the joints, left by rheumatic and gouty complaints, and are highly serviceable in cutaneous eruptions. Internally taken, this water gives considerable relief in disorders of the stomach, especially attended with acidity and heart-burn, in obstinate colics, jaundice, and in gravel, and other affections of the urinary organs.

Bari'glia.
Bari'lla. } See *Soda impura.*
Bari'llor.

BARK. A term very frequently employed to signify, by way of eminence, Peruvian bark. See *Cinchona.*

Bark, Carribæan. See *Cinchona Caribæa.*

Bark, Jamaica. See *Cinchona Caribæa.*

Bark, Peruvian. See *Cinchona.*

Bark, red. See *Cinchona oblongifolia.*

Bark, yellow. See *Cinchona cordifolia.*

Barley. See *Hordeum.*

Barley, caustic. See *Cevadilla.*

Barley, pearl. See *Hordeum.*

Barm. A name given to yeast.

BARNET WATER. It is of a purging kind, of a similar quality to that of Epsom, and about half its strength.

BARO'METER. (From *βαρος,* weight, and *μετρον,* measure.) An instrument to determine the weight of the air; it is commonly called a weather-glass.

Baro'nes. Small worms; called also Nepones.

Baro'ptis. A black stone, said to be an antidote to venomous bites.

Ba'ros. (Βαρος.) Gravity.

1. Hippocrates uses this word to express by it, an uneasy weight in any part.

2. It is also the Indian name for a species of camphire, which is distilled from the roots of the true cinnamon-tree.

Ba'rrenness. The same as sterility.

BA'RTHOLINE, Thomas, was born at Copenhagen in 1616. After studying in various parts of Europe, particularly Padua, and graduating at Basil, he became professor of anatomy in his native city; in which office he greatly distinguished himself, as well as in many other branches of learning. He was the first who described the lymphatics with accuracy; though some of these vessels, as well as the lacteals and thoracic duct, had been before discovered by other anatomists. Besides many learned works which he published, several others were unfortunately destroyed by fire in 1670; and he particularly regretted a dissertation on the ancient practice of midwifery, of which an outline was afterwards published by his son *Caspar.* Of those which remain, the most esteemed are, his epistolary correspondence with the most celebrated of his cotemporaries; his collection of cases where fœtuses have been discharged by preternatural outlets; and the "Medical and Philosophical Transactions of Copenhagen," enriched by the communications of many correspondents: this last work was in four volumes, published within the ten years preceding his death, which happened in 1680; and a fifth was afterwards added by his son.

Bartholinia'næ gla'ndulæ. See *Sublingual glands.*

Barycoi'a. (From *βαρυς,* heavy, and *ακουω,* to hear.) Deafness, or difficulty of hearing.

Baryoco'ccalon. (From βαρυς, heavy, and κοκκαλος, a nut; because it gives a deep sound.) A name for the stramonium.

Barypho'nia. (From βαρυς, dull, and φωνη, the voice.) A difficulty of speaking.

BARY'TES. (From βαρυς, heavy; so called because it is very ponderous.) *Cauk. Calk. Terra ponderosa. Baryt.* Ponderous earth. Heavy earth.

Barytes does not exist pure in nature. It is always found in combination with sulphuric or carbonic acid. United with the sulphuric acid, it forms the mineral called *sulphate of barytes*, or *barŏselenite*. It is found in Staffordshire, Derbyshire, &c. When united to carbonic acid, it is called *aërated barytes*, or *carbonate of barytes*, found at Anglezark, near Chorley, in Lancashire. Both combinations are met with regularly crystallized and amorphous.

Pure barytes has a much stronger affinity than any other body for sulphuric acid; it turns blue tincture of cabbage green. It is entirely infusible by heat alone, but melts when mixed with various earths. Its specific gravity is 4.000. It changes quickly in the air, swells, becomes soft, and falls into a white powder, with the acquisition of about one-fifth of its weight. This slaking is much more active and speedy than that of lime. It combines with phosphorus, which compound decomposes water rapidly. It unites to sulphur by the dry and humid way. It has a powerful attraction for water, which it absorbs with a hissing noise and consolidates it strongly. It is soluble in twenty times its weight of cold, and twice its weight of boiling water. Its crystals are long four-sided prisms of a sattin-like appearance. It is a deadly poison to animals.

Method of obtaining pure Barytes. — 1. Take native carbonate of barytes; reduce it to a fine powder and dissolve it in a sufficient quantity of diluted nitric acid; evaporate this solution till a pellicle appears, and then suffer it to crystallize in a shallow bason. The salt obtained is nitrate of barytes; expose this nitrate of barytes to the action of heat in a china cup, or silver crucible, and keep it in a dull red heat for at least one hour; then suffer the vessel to cool, and transfer the greenish solid contents, which are pure barytes, into a well-stopped bottle. When dissolved in a small quantity of distilled water, and evaporated, it may be obtained in a beautiful crystalline form.

In this process the nitric acid, added to the native carbonate of barytes, unites to the barytes, and expels the carbonic acid, and forms nitrate of barytes; on exposing this nitrate to heat, it parts with its nitric acid, which becomes decomposed into its constituents, leaving the barytes behind.

2. Pure barytes may likewise be obtained from its sulphate. For this purpose, boil powdered sulphate of barytes in a solution of twice or three times its weight of carbonate of potash, in a Florence flask, for about two hours; filter the solution, and expose what remains on the filter to the action of a violent heat.

In this case, the sulphuric acid of the barytes unites to the potash, and the carbonic acid of the latter joins to the barytes; hence sulphate of potash and carbonate of barytes are obtained. The former is in solution and passes through the filter; the latter is insoluble, and remains behind. From this artificial carbonate of barytes, the carbonic acid is driven off by heat.

Barytæ Murias. *Terra ponderosa salita.* The muriate of barytes is a very acrid and poisonous preparation. In small doses it proves sudorific, diuretic, deobstruent, and alterative; in an over-dose, emetic, and violently purgative. The late Dr. Crawford found it very serviceable in all diseases connected with scrophula; and the Germans have employed it with great success in some diseases of the skin and viscera, and obstinate ulcers. The dose of the saturated solution in distilled water, is from five to fifteen drops for children, and from fifteen to twenty for adults.

Basaal. (Indian.) The name of an Indian tree. A decoction of its leaves, with ginger, in water, is used as a gargle in disorders of the fauces. The kernels of the fruit kill worms. *Ray's Hist.*

BASA'LTES. (In the Æthiopic tongue, this word means *iron*, which is the colour of the stone.) A heavy and hard kind of stone, chiefly black, or green. It frequently contains iron, has a flinty hardness, is insoluble by acids, and is fusible by fire. The most remarkable property of this substance is its figure, being never found in strata, like other marbles, but always standing up in the form of regular angular columns, composed of a number of joints, one placed upon and nicely fitted to another, as if formed by the hands of a skilful architect. Some regard this fusible substance as a volcanic production; others have supposed that it was formed from water. The Giant's Causeway, in the county of Antrim, in Ireland, and the rock of Pereniere, near St. Santdoux, in Auvergne, are formed of these stones. The distinctive characters of basaltes are, a regular form; hardness sufficient to give fire with steel; and a cinereous, gray colour, inclining to black.

Basani'tes. (From βασανιζω, to find out.) A stone said, by Pliny, to contain a bloody juice, and useful in diseases of the liver: also a stone upon which, by some, the purity of gold was formerly said to be tried, and of which medical mortars were made.

Base, acidifiable. See *Acid.*

Base, acidifying. See *Acid.*

Basia'tio. (From *basio*, to kiss.) Venereal connection between the sexes.

Basia'tor. See *Orbicularis oris*.

Basil. See *Ocimum basilicum*.

Basila're os. (*Basilaris*; from βασιλευς, a king.) Several bones were so termed by the antients; as the sphenoid and occipital bones.

BASILA'RIS ARTE'RIA. Basilary artery. An artery of the brain. So called because it lies upon the basilary process of the occipital bone. It is formed by the junction of the two vertebral arteries within the skull, and runs forwards to the sella turcica along the *pons varolii*, which it supplies, as well as the adjacent parts, with blood.

Basila'ris proce'ssus. Basilary process. See *Occipital bone*.

Basilia'ris apo'physis. The great apophysis of the os occipitis.

Basi'lica media'na. See *Basilica vena*.

Basi'lica nux. The walnut.

BASI'LICA VE'NA. The large vein that runs in the internal part of the arm, and evacuates its blood into the axillary vein. The branch which crosses, at the head of the arm, to join this vein, is called the *basilic median*. They may either of them be opened in the operation of blood-letting.

Basilicon ointment. See *Basilicum unguentum*.

Basi'licum. (From βασιλικος, royal; so called from its great virtues.) *Ocimum. Basil*. See *Ocimum Basilicum*.

Basi'licum ungue'ntum. *Unguentum basilicum flavum*. An ointment popularly so called from its having the ocimum basilicum in its composition. It came afterwards to be composed of wax, resin, &c. and is now called ceratum resinæ.

Basi'licus pu'lvis. The royal powder. A preparation formerly composed of calomel, rhubarb, and jalap. Many compositions were, by the antients, so called, from their supposed pre-eminence.

Basili'dion. An itchy ointment was formerly so called by Galen.

Ba'silis. A name formerly given to collyriums of supposed virtues, by Galen.

Basili'scus. (From βασιλευς, a king.) The basilisk, or cockatrice, a poisonous serpent; so called from a white spot upon its head, which resembles a crown. Also the philosopher's stone, and corrosive sublimate.

Basio-cerato-chondro-glo'ssus. See *Hyoglossus*.

Basio-glo'ssum. See *Hyoglossus*.

Basio-pharyngæ'us. See *Constrictor pharyngis medius*.

BA'SIS. (From βαινω, to go: the support of any thing, upon which it stands or goes.) 1. This word is frequently applied anatomically to the body of any part, or to that part from which the other parts appear, as it were, to proceed, or by which they are supported.

2. In pharmacy it signifies the principal ingredient.

Ba'sis ce'rebri. A term applied formerly to the palatum.

Ba'sis co'rdis. The broad part of the heart is so called, to distinguish it from the apex, or point.

Bassi co'lica. The name of a medicine in Scribonius Largus, compounded of aromatics and honey.

Bastard Pleurisy. See *Peripneumonia notha*.

Bata'tas. (So the natives of Peru call the potatoe, which is a native of that country, whence our word potatoe.) A species of night-shade, *solanum tuberosum*, Linn. which see.

BATH. (*Balneum, -i*, n. From βαλανεῖον, a bath.) Baths are of several kinds.

I. A convenient receptacle of water, for persons to wash or plunge in, either for health or pleasure, is called a bath. These are distinguished into hot and cold; and are either natural or artificial. The natural hot baths are formed of the water of hot springs, of which there are many in different parts of the world; especially in those countries where there are, or have evidently been, volcanoes. The artificial hot baths consist either of water, or of some other fluid, made hot by art. The cold bath consists of water, either fresh or salt, in its natural degree of heat; or it may be made colder by art, as by a mixture of nitre, sal-ammoniac, &c. The chief hot baths in our country are those of Bath and Bristol, and those of Buxton and Matlock; which latter, however, are rather warm, or tepid, than hot. The use of these baths is found to be beneficial in diseases of the head, as palsies, &c.; in cuticular diseases, as leprosies, &c.; obstructions and constipations of the bowels, the scurvy, and stone; and in many diseases of women and children. The cold bath, though popularly esteemed one of the most innocent remedies yet discovered, is not, however, to be adopted indiscriminately. On the contrary, it is liable to do considerable mischief in all cases of *diseased viscera*, and is not, in any case, proper to be used during the existence of costiveness. As a preventive remedy for the young, and as a general bracer for persons of a relaxed fibre, especially of the female sex, it often proves highly advantageous; and, in general, the popular idea is a correct one, that the *glow* which succeeds the use of cold or temperate baths, is a test of their utility; while, on the other hand, their producing *chilliness*, head-ache, &c. is a proof of their being pernicious.

The Cold Bath.

The diseases and morbid symptoms, for which the cold bath, under one form or another, may be applied with advantage, are very numerous; and some of them deserve particular attention. One of the most important of its uses is in *ardent fever*; and, under proper management, it forms a highly valuable remedy in this dangerous disorder. It is highly important, however, to attend to the precautions which the use of this vigorous remedial process requires. "Affusion with cold water," Dr. Currie observes, "may be used whenever the heat of the body is steadily above the natural standard, when there is no sense of chilliness, and especially when there is no general nor profuse perspiration. If used during the cold stage of a fever, even though the heat be higher than natural, it brings on interruption of respiration, a fluttering, weak, and extremely quick pulse, and certainly might be carried so far as to extinguish animation entirely." The most salutary consequence which follows the proper use of this powerful remedy, is the production of free and general perspiration. It is this circumstance that appears to give so much advantage to a general affusion of cold water in fevers, in preference to any partial application. The cold bath is better known, especially in this country, as a general tonic remedy in various chronic diseases. The general circumstances of disorder for which cold bathing appears to be of service, according to Dr. Saunders, are a languor and weakness of circulation, accompanied with profuse sweating and fatigue, on very moderate exertion; tremors in the limbs, and many of those symptoms usually called nervous; where the moving powers are weak, and the mind listless and indolent; but, at the same time, where no permanent morbid obstruction, or visceral disease, is present. Such a state of body is often the consequence of a long and debilitating sickness, or of a sedentary life, without using the exercise requisite to keep up the activity of the bodily powers. In all these cases, the great object to be fulfilled, is to produce a considerable re-action, from the shock of cold water, at the expense of as little heat as possible; and when cold-bathing does harm, it is precisely where the powers of the body are too languid to bring on re-action, and the chilling effects remain unopposed. When the patient feels the shock of immersion very severely, and, from experience of its pain, has acquired an insuperable dread of this application; when he has felt little or no friendly glow to succeed the first shock, but on coming out of the bath remains cold, shivering, sick at the stomach, oppressed with head-ache, languid, drowsy and listless, and averse to food and exercise during the whole of the day, we may be sure that the bath has been too cold, the shock too severe, and no re-action produced at all adequate to the impression on the surface of the body.

There is a kind of slow, irregular fever, or rather febricula, in which Dr. Saunders has often found the cold bath of singular service. This disorder principally affects persons naturally of a sound constitution, but who lead a sedentary life, and at the same time are employed in some occupation which strongly engages their attention, requires much exertion of thought, and excites a degree of anxiety. Such persons have constantly a pulse rather quicker than natural, hot hands, restless nights, and an impaired appetite, but without any considerable derangement in the digestive organs. This disorder will continue for a long time, in an irregular way, never entirely preventing their ordinary occupation, but rendering it more than usually anxious and fatiguing, and often preparing the way for confirmed hypochondriasis. Persons in this situation, are remarkably relieved by the cold-bath, and, for the most part, bear it well; and its use should also, if possible, be aided by that relaxation from business, and that diversion of the mind from its ordinary train of thinking, which are obtained by attending a watering place. The Doctor also found cold bathing hurtful in chlorosis, and observes, that it is seldom admissible in those cases of disease in the stomach which are brought on by high living, and constitute what may be termed the true dyspepsia.

The topical application of cold water, or of a cold saturnine lotion, in cases of local inflammation, has become an established practice; the efficacy of which is daily experienced. Burns of every description will bear a most liberal use of cold water, or even of ice; and this may be applied to a very extensive inflamed surface, without even producing the ordinary effects of general chilling, which would be brought on from the same application to a sound and healthy skin. Another very distressing symptom, remarkably relieved by cold water, topically applied, is that intolerable itching of the vagina, which women sometimes experience, entirely unconnected with any general cause, and which appears to be a kind of herpes confined to that part. Cold water has also been used topically in the various cases of strains, bruises, and similar injuries, in tendinous and ligamentous parts, with success; also in rigidity of muscles, that have been long kept at rest, in order to favour the union of bone, where there appears to have been no organic injury, but only a deficiency of nervous energy, and in mobility of parts, or at most, only slight adhesions, which would give way to regular exercise of the weakened limb. Another very striking instance of the powerful effects of topical cold, in stimulating a part to action, is shewn in the use of cold, or even iced water, to the vagina of parturient women, during the dangerous hemorrhages that take place from the uterus, on the partial separation of the placenta.

The Shower Bath.

A species of cold bath. A modern invention, in which the water falls, through numerous apertures, on the body. A proper apparatus for this purpose is to be obtained at the shops. The use of the shower bath applies, in every case, to the same purposes as the cold bath, and is often attended with particular advantages. 1. From the sudden contact of the water, which, in the common cold bath, is only momentary, but which, in the shower bath, may be prolonged, repeated, and modified, at pleasure; and, secondly, from the head and breast, which are exposed to some inconvenience and danger in the common bath, being here effectually secured, by receiving the first shock of the water.

The Tepid Bath.

The range of temperature, from the lowest degree of the hot bath to the highest of the cold bath, forms what may be termed the tepid. In general, the heat of water which we should term tepid, is about 90 deg. In a medicinal point of view, it produces the greatest effect in ardent fever, where the temperature is little above that of health, but the powers of the body weak, not able to bear the vigorous application of cold immersion. In cutaneous diseases, a tepid bath is often quite sufficient to produce a salutary relaxation, and perspirability of the skin.

The Hot Bath.

From 93 to 96 deg. of Fahrenheit, the hot bath has a peculiar tendency to bring on a state of repose, to alleviate any local irritation, and thereby induce sleep. It is, upon the whole, a safer remedy than the cold bath, and more peculiarly applicable to very weak and irritable constitutions, whom the shock produced by cold immersion would overpower, and who have not sufficient vigour of circulation for an adequate re-action. In cases of topical inflammation, connected with a phlogistic state of body, preceded by rigor and general fever, and where the local formation of matter is the solution of the general inflammatory symptoms, experience directs us to the use of the warm relaxing applications, rather than those which, by exciting a general re-action, would increase the local complaint. This object is particularly to be consulted when the part affected is one that is essential to life. Hence it is that in fever, where there is a great determination to the lungs, and the respiration appears to be locally affected, independently of the oppression produced by mere febrile increase of circulation, practitioners have avoided the external use of cold, in order to promote the solution of the fever; and have trusted to the general antiphlogistic treatment, along with the topically relaxing application of warm vapour, inhaled by the lungs. Warm bathing appears to be peculiarly well calculated to relieve those complaints that seem to depend on an irregular or diminished action of any part of the alimentary canal; and the state of the skin, produced by immersion in warm water, seems highly favourable to the healthy action of the stomach and bowels. Another very important use of the warm bath, is in herpetic eruptions, by relaxing the skin, and rendering it more pervious, and preparing it admirably for receiving the stimulant applications of tar ointment, mercurials, and the like, that are intended to restore it to a healthy state. The constitutions of children seem more extensively relieved by the warm bath than those of adults; and this remedy seems more generally applicable to acute fevers in them than in persons of a more advanced age. Where the warm bath produces its salutary operation, it is almost always followed by an easy and profound sleep. Dr. Saunders strongly recommends the use of the tepid bath, or even one of a higher temperature, in the true menorrhagia of females. In paralytic affections of particular parts, the powerful stimulus of heated water is generally allowed; and in these cases, the effect may be assisted by any thing which will increase the stimulating properties of the water, as, for instance, by the addition of salt. In these cases, much benefit may be expected from the use of warm sea-baths. The application of the warm bath topically, as in pediluvia, or fomentations to the feet, often produces the most powerful effects in quieting irritation in fever, and bringing on a sound and refreshing repose. The cases in which the warm bath is likely to be attended with danger, are particularly those where there exists a strong tendency to a determination of blood to the head; and apoplexy has sometimes been thus brought on. The lowest temperature will be required for cutaneous complaints, and to bring on relaxation in the skin, during febrile irritation; the warmer will be necessary in paralysis; more heat should be employed on a deep-seated part than one that is superficial.

The Vapour Bath.

The vapour bath, called also *Balneum laconicum,* though not much employed in England, forms a valuable remedy in a variety of cases. In most of the hot natural waters on the Continent, the vapour bath forms a regular part of the bathing apparatus, and is there highly valued. In no country, however, is this application carried to so great an extent as in Russia, where it forms the principal and almost daily luxury of all the people, in every rank; and it is employed as a sovereign remedy for a great variety of disorders. The Hon. Mr. Basil Cochrane has lately published a Treatise on the Vapour Bath, from which, it appears, he has brought the apparatus to such perfection, that he can apply it of all degrees of temperature, partially or generally, by shower, or by stream, with a great force or a small one; according to the particular circumstances under which patients are so variously placed, who require such assistance. See *Cochrane on Vapour Bath.* Connected with this article, is the *air-pump vapour-bath*; a species of vapour bath, or machine, to which the inventor has given this name. This apparatus has been found efficacious in removing paroxysms of the gout, and preventing their recurrence; in acute and chronic rheumatism, palsy, cutaneous diseases, ulcers, &c. It has also been proposed in chilblains, leprosy, yaws, tetanus, amenorrhea, and dropsy.

II. When the vessels in which bodies are exposed to the action of heat, are not placed in immediate contact with the fire, but receive the required degree of heat by another intermediate body, such apparatus is termed a bath. These have been variously named, as dry, vapour, &c. Modern chemists distinguish three kinds:

1. *Balneum arenæ*, or the sand bath. This consists merely of an open iron, or baked clay sand-pot, whose bottom is mostly convex, and exposed to the furnace. Finely sifted sea-sand is put into this, and the vessel containing the substance to be heated, &c. in the sand bath, immersed in the middle.

2. *Balneum mariæ*, or the water bath. This is very simple, and requires no particular apparatus. The object is, to place the vessel containing the substance to be heated, in another, containing water; which last must be of such a nature as to be fitted for the application of fire, as a common still, or kettle.

3. *The vapour bath.* When any substance is heated by the steam, or vapour, of boiling water, chemists say it is done by means of a vapour bath.

III. Those applications are called *dry baths*, which are made of ashes, salt, sand, &c. The antients had many ways of exciting a sweat, by means of a dry heat; as by the use of hot sand, stove rooms, or artificial bagnios; and even from certain natural hot steams of the earth, received under a proper arch, or hot-house, as we learn from Celsus. They had also another kind of bath by insolation, where the body was exposed to the sun for some time, in order to draw forth the superfluous moisture from the inward parts; and to this day it is a practice, in some nations, to cover the body over with horse-dung, especially in painful chronic diseases. In New England, they make a kind of stove of turf, wherein the sick are shut up to bathe, or sweat. It was probably from a knowledge of this practice, and of the exploded doctrines of Celsus, that the noted empiric Dr. Graham drew his notions of the salutary effects of what he called *earth bathing*; a practice which, in the way he used it, consigned some of his patients to a perpetual mansion under the ground. The like name of *dry* bath, is sometimes also given to another kind of bath, made of kindled coals, or burning spirit of wine. The patient being placed in a convenient close chair, for the reception of the fume, which rises and provokes sweat in a plentiful manner; care being taken to keep the head out, and to secure respiration. This bath has been said to be very effectual in removing old obstinate pains in the limbs.

IV. *Medicated baths* are such as are saturated with various mineral, vegetable, or sometimes animal substances. Thus we have sulphur and iron baths, aromatic and milk baths. There can be no doubt that such ingredients, if duly mixed, and a proper temperature given to the water, may, in certain complaints, be productive of effects highly beneficial. Water, impregnated with sulphate of iron, will abound with the bracing particles of that metal, and may be useful for strengthening the part to which it is applied, re-invigorating debilitated limbs, stopping various kinds of bleeding, restoring the menstrual and hemorrhoidal discharges when obstructed, and, in short, as a substitute for the natural iron bath. There are various other medicated baths, such as those prepared with alum and quick-lime, sal-ammoniac, &c. by boiling them together, or separately, in pure rain water. These have long been reputed as eminently serviceable in paralytic, and all other diseases arising from nervous and muscular debility.

BATH WATERS. *Bathoniæ aquæ. Solis aquæ. Badiguæ aquæ.* The city of Bath has been celebrated, for a long series of years, for its numerous hot springs, which are of a higher temperature than any in this kingdom, (from 112° to 116°,) and, indeed, are the only natural waters which we possess that are at all hot to the touch; all the other thermal waters being of a heat below the animal temperature, and only deserving that appellation from being invariably warmer than the general average of the heat of common springs. By the erection of elegant baths, these waters are particularly adapted to the benefit of invalids, who find here a variety of establishments, contributing equally to health, convenience, and amusement. There are three principal springs in the city of Bath, namely, those called the *King's Bath*, the *Cross Bath*, and the *Hot Bath*; all within a short distance of each other, and emptying themselves into the river Avon, after having passed through the several baths. Their supply is so copious, that all the large reservoirs used for bathing are filled every evening with fresh water, from their respective fountains. In their sensible and medicinal properties, there is but a slight difference. According to Dr. Falconer, the former are—1. That the water, when newly drawn, appears clear and colourless, remains perfectly inactive, without bubbles, or any sign of briskness, or effervescence. 2. After being exposed to the open air, for some hours, it becomes rather turbid, by the separation of a pale yellow, ochrey precipitate, which gradually subsides. 3. No odour is perceptible from a glass of the fresh water, but a slight pungency to the taste from a large mass of it, when fresh drawn; which, however, is neither fetid nor sulphureous. 4. When hot from the pump, it affects the mouth with a strong chalybeate impression, without being of a saline or pungent taste. And, fifthly, on growing cold, the chalybeate taste is entirely lost, leaving only a very slight sensation on the tongue, by which it can scarcely be distinguished from common hard spring-water. The temperature of the King's Bath water, which is usually preferred for drinking, is, when fresh drawn in the glass, above 116 deg.; that of the Cross Bath, 112 deg. But, after flowing into the spacious bathing vessels, it is generally from 100 to 106 deg. in the hotter baths, and from 92 to 94 deg. in the Cross Bath; a temperature which remains nearly stationary, and is greater than that of any other natural spring in Britain. A small quantity of gas is also disengaged from these waters, which Dr. Priestley first discovered to contain no more than one-twentieth part of its bulk of fixed air, or carbonic acid. The chemical properties of the Bath waters, according to the most accurate analysers, Doctors Lucas, Falconer, and Gibbs, contain so small a proportion of iron, as to amount only to one-twentieth or one-thirty-eighth of a grain in the pint; and, according to Dr. Gibbs, fifteen grains and a quarter of siliceous earth in the gallon. Dr. Saunders estimates a gallon of the King's Bath water to contain about eight cubic inches of carbonic acid, and a similar quantity of air, nearly azotic, about eighty grains of solid ingredients, one-half of which probably consists of sulphate and muriate of soda, fifteen grains and a half of siliceous earth, and the remainder is selenite, carbonate of lime, and so small a portion of oxide of iron as to be scarcely calculable. Hence he concludes, that the King's Bath water is the strongest chalybeate; next in order, the Hot Bath water; and lastly, that of the Cross Bath, which contains the smallest proportions of chalybeate, gaseous and saline, but considerably more of the earthy particles; while its water, in the pump, is also two degrees lower than that of the others. It is likewise now ascertained, that these springs do not exhibit the slightest traces of sulphur, though it was formerly believed, and erroneously supported on the authority of Dr. Charleton, that the subtile aromatic vapour in the Bath waters, was a sulphureous principle, entirely similar to common brimstone.

With regard to the effect of the Bath waters on the human system, independent of their specific properties, as a medicinal remedy not to be imitated completely by any chemical process, Dr. Saunders attributes much of their salubrious influence to the natural degree of warmth peculiar to these springs, which, for ages, have preserved an admirable degree of uniformity of temperature. He thinks too, that one of their most important uses is that of an external application, yet supposes that, in this respect, they differ little from common water, when heated to the same temperature, and applied under similar circumstances.

According to Dr. Falconer, the Bath water, when drunk fresh from the spring, generally raises, or rather accelerates the pulse, increases the heat, and promotes the different secretions. These symptoms in most cases, become perceptible soon after drinking it, and will sometimes continue for a considerable time. It is, however, remarkable, that they are only produced in invalids. Hence we may conclude, that these waters not only possess heating properties, but their internal use is likewise attended with a peculiar stimulus, acting more immediately on the nerves.

One of the most salutary effects of the Bath water, consists in its action on the urinary organs, even when taken in moderate doses. Its operation on the bowels varies in different individuals, like that of all other waters, which do not contain any cathartic salt; but, in general, it is productive of costiveness: an effect resulting from the want of an active stimulus to the intestines, and probably also from the determination this water occasions to the skin, more than from any astringency which it may possess; for, if perspiration be suddenly checked during the use of it, a diarrhœa is sometimes the consequence. Hence it appears that its stimulant powers are primarily, and more particularly exerted in the stomach, where it produces a variety of symptoms, sometimes slight and transient, but, occasionally, so considerable and permanent, as to require it to be discontinued. In those individuals with whom it is likely to agree, and prove beneficial, the Bath waters excite, at first, on agreeable glowing sensation in the stomach, which is speedily followed by an increase both of appetite and spirits, as well as a quick secretion of urine. In others, when the use of them is attended with head-ache, thirst, and constant dryness of the tongue, heaviness, loathing of the stomach, and sickness; or if they are not evacuated, either by urine or an increased perspiration, it may be justly inferred that their further continuance is improper.

The diseases for which these celebrated waters are resorted to, are very numerous, and are some of the most important and difficult of cure of all that come under medical treatment. In most of them, the bath is used along with the waters, as an internal medicine. The general indications, of the propriety of using this medicinal water, are in those cases where a gentle, gradual, and permanent stimulus, is required. Bath water may certainly be considered as a chalybeate, in which the iron is very small in quantity, but in a highly active form; and the degree of temperature is in itself a stimulus, often of considerable powers. These circumstances again point out the necessity of certain cautions, which, from a view of the mere quantity of foreign contents, might be thought superfluous. Although, in estimating the powers of this medicine, allowance must be made for local prejudice in its favour, there can be no doubt but that its employment is hazardous, and might often do considerable mischief, in various cases of active inflammation, especially in irritable habits, where there exists a strong tendency to hectic fever; and even in the less inflammatory state of diseased and suppurating viscera; and, in general, wherever a quick pulse and dry tongue indicate a degree of general fever. The cases, therefore, to which this water are peculiarly suited, are mostly of the chronic kind; and by a steady perseverance in this remedy, very obstinate disorders have given way. The following, Dr. Saunders, in his Treatise on Mineral Waters, considers as the principal, viz. 1. Chlorosis, a disease which, at all times, is much relieved by steel, and will bear it, even where there is a considerable degree of feverish irritation, receives particular benefit from the Bath water; and its use, as a warm bath, excellently contributes to remove that languor of circulation, and obstruction of the natural evacuations, which constitute the leading features of this common and troublesome disorder. 2. The complicated diseases, which are often brought on by a long residence in hot climates, affecting the secretion of bile, the functions of the stomach, and alimentary canal, and which generally produce organic derangement in some part of the hepatic system, often receive much benefit from the Bath water, if used at a time when suppurative inflammation is not actually present. 3. Another and less active disease of the biliary organs, the jaundice, which arises from a simple obstruction of the gall-ducts, is still oftener removed by both the internal and external use of these waters. 4. In rheumatic complaints, the power of this water, as Dr. Charleton well observes, is chiefly confined to that species of rheumatism which is unattended with inflammation, or in which the patient's pains are not increased by the warmth of his bed. A great number of the patients that resort to Bath, especially those that are admitted into the hospital, are affected with rheumatism in all its stages; and it appears, from the most respectable testimony, that a large proportion of them receive a permanent cure. (See *Falconer on Bath Water in Rheumatic Cases.*) 5. In gout, the greatest benefit is derived from this water, in those cases where it produces anomalous affections of the head, stomach, and bowels; and it is here a principal advantage to be able to bring, by warmth, that active local inflammation in any limb, which relieves all the other troublesome and dangerous symptoms. Hence it is that Bath water is commonly said to produce the gout; by which is only meant that, where persons have a gouty affection, shifting from place to place, and thereby much disordering the system, the internal and external use of the Bath water will soon bring on a general increase of action, indicated by a flushing in the face, fulness in the circulating vessels, and relief of the dyspeptic symptoms; and the whole disorder will terminate in a regular fit of the gout in the extremities, which is the crisis always to be wished for. 6. The colica pictonum, and the paralysis, or loss of nervous power in particular limbs, which is one of its most serious consequences, is found to be peculiarly relieved by the use of the Bath waters, more especially when applied externally, either generally, or upon the part affected.

The quantity of water taken daily, during a full course, and by adults, is recommended by Dr. Falconer, not to exceed a pint and a half, or two pints; and in chlorosis, with irritable habits, not more than one pint is employed; and when the bath is made use of, it is generally two or three times a week, in the morning. The Bath waters require a considerable time to be persevered in, before a full and fair trial can be made. Chronic rheumatism, habitual gout, dyspepsia, from a long course of high and intemperate living, and the like, are disorders not to be removed by a short course of any mineral water, and many of those who have once received benefit at the fountains, find it necessary to make an annual visit to them, to repair the waste in health during the preceding year.

BATH, CAUTERES. A sulphureous bath near Barege, which raises the mercury in Fahrenheit's thermometer to 131 deg.

BATH, ST. SAUVEUR'S. A sulphureous and alkaline bath, in the valley adjoining Barege, the latter of which raises Fahrenheit's thermometer as high as 131 deg. It is much resorted to from the South of France, and used chiefly externally, as a simple thermal water.

Bath, cold. See *Bath.*

Bath, vapour. See *Bath.*

Bath, tepid. See *Bath.*

Bath, hot. See *Bath.*

Ba′thmis. (From βαινω, to enter.) *Bathmus.* The seat, or base; the cavity of a bone, with the protuberance of another, particularly those at the articulation of the humerus and ulna, according to Hippocrates and Galen.

Batho'niæ a'quæ. Bath waters.

Ba'thron. (From βαινω, to enter.) *Bathrum.* The same as bathmis; also an instrument used in the extension of fractured limbs, called scamnum. *Hippocrates.* It is described by Oribasius and Scultetus.

Ba'tia. A name formerly given to a retort.

Bati'non-mo'ron. (From βατος, a bramble, and μορον, a raspberry.) A raspberry.

Batra'chium. (From βατραχος, a frog; so called from its likeness to a frog.) The herb crow's foot, or ranunculus.

Ba'trachus. (From βατραχος, a frog; so called because they who are infected with it croak like a frog.) An inflammatory tumour under the tongue.

Battari'smus. (From Βαττος, a Cyrenæan prince, who stammered.) Stammering; a defect in pronunciation. See *Psellismus.*

Batta'ta Virginia'na. See *Solanum tuberosum.*

Batta'ta peregri'na. The cathartic potatoe; perhaps a species of *ipomœa.* If about two ounces of them are eaten at bedtime, they greatly move the belly the next morning.

BATTIE, William, was born in Devonshire, in 1704. He graduated at Cambridge, and after practising some years successfully at Uxbridge, settled in London, and became a fellow of the College of Physicians, as well as of the Royal Society. The insufficiency of Bethlehem hospital to receive all the indigent objects labouring under insanity in this metropolis, naturally led to the establishment of another similar institution; and Dr. Battie having been very active in promoting the subscription for that purpose, he was appointed physician to the new institution, which was called St. Luke's Hospital, then situated on the north side of Moorfields. In 1757 he published a treatise on madness; and a few years after, having exposed before the House of Commons the abuses often committed in private madhouses, they became the subject of legislative interference, and were at length placed under the controul of the College of Physicians, and the magistrates in the country. He died at the age of 72.

Bau'da. A vessel for distillation was formerly so called.

BAUHIN, John, was born at Lyons, in 1541. Being greatly attached to botany, he accompanied the celebrated Gesner in his travels through several countries of Europe, and collected abundant materials for his principal work, the "Historia Plantarum," which contributed greatly to the improvement of his favourite science. He was, at the age of 32, appointed physician to the duke of Wirtemberg, and died in 1613. A Treatise on Mineral Waters, and some other publications by him also remain.

BAUHIN, Gaspard, was brother to the preceding, but younger by 20 years. He graduated at Basle, after studying at several universities, and was chosen Greek professor at the early age of 22; afterwards professor of anatomy and botany; then of medicine, with other distinguished honours, which he retained till his death in 1624. Besides the plants collected by himself, he received material assistance from his pupils and friends, and was enabled to add considerably to the knowledge of botany; on which subject, as well as anatomy, he has left numerous publications. Among other anatomical improvements, he claims the discovery of the valve of the colon. His "Pinax" contains the names of six thousand plants mentioned by the antients, tolerably well arranged; and being continually referred to by Linnæus, must long retain its value.

Baulmoney. See *Æthusa meum.*

BAUMÈ, Anthony, an apothecary, born at Senlis in 1728. He distinguished himself at an early age by his skill in chemistry and pharmacy: and was afterwards admitted a member of the Royal Academy of Sciences of Paris. He also gave lectures on chemistry for several years with great credit. Among other works, he published "Elements of Pharmacy," and a "Manual of Chemistry," which met with considerable approbation: also a detailed account of the different kinds of soil, and the method of improving them for the purposes of agriculture.

Bau'rach. (Arab. *Bourach.*) A name formerly applied to nitre, or any salt; hence it is that borax took its name, which is also thus called, as well as the mineral fixed alkaline salt.

Baxa'na. (Indian.) A poisonous tree growing near Ormuz; called by Ray, rabuxit.

Bay-cherry. See *Prunus Lauro-cerasus.*

Bay-leaves. See *Laurus.*

Bay-leaved Passion-flower. The plant so called is the *Passiflora laurifolia* of Linnæus: which see.

Bay-salt. A very pure salt, prepared from sea-water by spontaneous evaporation.

Ba'zcher. A Persian word for antidote.

Bde'lla. (From βδαλλω, to suck.) *Bdellerum.* A horse-leech.

BDE'LLIUM. (From *bedallah.* Arab.) *Madeleon. Bolchon. Balchus.* Called by the Arabians, mokel. A gum, like very impure myrrh. It is one of the weakest of the deobstruent gums. It was sometimes used as a pectoral and an emmenagogue. Applied externally, it is stimulant, and promotes suppuration. It is never met with in the shops of this country.

Bde'llus. (From βδεω, to break wind.) A discharge of wind by the anus.

Bdely'gmia. (From βδεω, to break wind.) Any filthy and nauseous odour.

Bean. The common bean is the seed of the *Vicia faba* of Linnæus: which see.

Bean, French.
Bean, Kidney. } See *Phaseolus vulgaris.*

Bean, Malacca. See *Avicennia tomentosa.*

Bean of Carthagena. See *Bejuio.*

Bean, St. Ignatius. See *Ignatia amara.*

Beard. The hair growing on the chin and adjacent parts of the face, in adults of the male sex.

Bear's-breech. See *Acanthus.*

Bear's-foot. See *Helleborus fœtidus.*

Bear's-whortleberry. See *Arbutus uva ursi.*

Be'cca. A fine kind of resin from the turpentine and mastich trees of Greece and Syria, formerly held in great repute.

BECCABU'NGA. (From *bach bungen*, water-herb, German, because it grows in rivulets.) See *Veronica.*

Be'cha. See *Bechica.*

Be'chica. (From βηξ, a cough.) *Bechita.* Medicines to relieve a cough. An obsolete term. The *trochisci bechici albi* consist of starch and liquorice, with a small proportion of florentine orris root made into lozenges, with mucilage of gum-tragacanth. They are a soft pleasant demulcent. The *trochisci bechici nigri* consist chiefly of the juice of liquorice, with sugar and gum-tragacanth.

Be'chion. (From βηξ, a cough; so called from its supposed virtues in relieving coughs.) *Bechium.* The herb colt's-foot, or tussilago.

Becui'ba nux. (Indian.) A large nut growing in Brasil, from which a balsam is drawn that is held in estimation in rheumatisms.

Bede'guar. (Arab.) *Bedeguar.* The Carduus lacteus Syriacus is so called, and also the cynosbatos, or rosa canina.

Bedengian. The name of the love-apples in Avicenna.

Bedstraw, lady's. See *Galium Aparine.*

BEE. *Apis mellifica* of Linnæus. This insect was formerly exhibited, after being dried and powdered, internally, as a diuretic. It is to the industry of bees we are indebted for those valuable articles, honey and wax. See *Honey* and *Cera.*

Beech tree. See *Fagus.*

BEES' WAX. See *Cera.*

Beet, red. See *Beta.*

Beet, white. A variety of red beet. The juice and powder of the root are good to excite sneezing, and will bring away a considerable quantity of mucus.

Be'gma. (From βησσω, to cough.) A cough. Expectorated mucus, according to Hippocrates.

Be'hen a'lbum. (From *behen*, a finger, Arab.). See *Centaurea behen.*

Be'hen officina'rum. See *Cucubalus behen.*

Be'hen ru'brum. See *Statice Limonium.*

Beide'lsar. *Beidellopar.* A species of Asclepias, used in Africa as a remedy for fever and the bites of serpents. The caustic juice which issues from the roots when wounded, is used by the negroes to destroy venereal and similar swellings.

Beju'io. *Habilla de Carthagenâ.* Bean of Carthagena. A kind of bean in South America, famed for being an effectual antidote against the poison of all serpents, if a small quantity is eaten immediately. This bean is the peculiar product of the jurisdiction of Carthagena.

Bela-aye co'rtex. (Indian.) *Belae.* A bark of Madagascar, said to be of considerable efficacy in the cure of diarrhœas.

Belemnoi'des. (From βελεμνον, a dart, and ειδος, form; so named from their dart-like shape.) *Belenoides. Beloidos.* The styloid process of the temporal bone, and the lower end of the ulna, were formerly so called.

Bele'son. (Indian.) *Belilia.* The *Mussenda frondosa* of Linnæus, a decoction of which is, according to Ray, cooling.

BELLADO'NNA. (From *bella donna*, Italian, a handsome lady; so called because the ladies of Italy use it, to take away the too florid colour of their faces.) See *Atropa belladonna.*

Be'llegu.
Bellere'gi.
Be'lnileg.
Belle'ricæ. } See *Myrobalanus Bellirica.*

Bellidioi'des. (From *bellis*, a daisy, and ειδος, form.) See *Chrysanthemum.*

BELLI'NI, Laurence, an ingenious physician, born at Florence in 1643. He was greatly attached to the mathematics, of which he was made professor at Pisa, when only twenty years of age. He was soon after appointed professor of anatomy, which office he filled with credit for nearly thirty years. He was one of the chief supporters of the mathematical theory of medicine, which attempted to explain the functions of the body, the causes of diseases, and the operations of medicines on mechanical principles: and having imprudently regulated his practice accordingly, he was generally unsuccessful, and lost the confidence of the public, as well as of Cosmo III. of Florence, who had appointed him his physician. In his anatomical researches he was more successful, having first accurately described the nervous papillæ of the tongue, and discovered them to be the organ of taste; and also having made better known the structure of the kidney. He was the author of several other publications, and died in 1704.

BE'LLIS. (*à bello colore*, from its fair colour.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia superflua.* The daisy.

Be'llis ma'jor. See *Chrysanthemum.*

Be'llis mi'nor. See *Bellis perennis.*

Be'llis pere'nnis. The systematic name

of the common daisy. *Bellis. Bellis minor.* The *bellis perennis* of Linnæus: — *scapo nudo,* or bruisewort, was formerly directed in pharmacopœias by this name. Although the leaves and flowers are rather acrid, and are said to cure several species of wounds, they are never employed by modern surgeons.

Bello′culus. (From *bellus,* fair, and *oculus,* the eye.) A precious stone, resembling the eye, and formerly supposed to be useful in its disorders.

Be′llon. The Devonshire colic, or colica pictonum.

Bellona′ria. (From *Bellona,* the goddess of war.) A herb which, if eaten, makes people mad, and act outrageously, like the votaries of Bellona.

BELLOSTE, Augustin, a surgeon, born at Paris in 1654. After practising several years there, and as an army surgeon, he was invited to attend the mother of the Queen of Sardinia, and continued at Turin till his death in 1730. He was inventor of a mercurial pill, called by his name, by which he is said to have acquired a great fortune. The work by which he is principally known, is called the "Hospital Surgeon," which passed through numerous editions, and was translated into most of the European languages. Among other useful observations, he recommended piercing carious bones, to promote exfoliation, which indeed Celsus had advised before; and he blamed the custom of frequently changing the dressings of wounds, as retarding the cure.

Bellu′tta Tsja′mpacam. (Indian.) A tree of Malabar, to which many virtues are attributed.

Belmu′schus. A name given to the Abelmoschus.

Belo′ere. (Indian.) An evergreen plant of America, whose seeds purge moderately, but the leaves roughly.

Belonoi′des. *Beloides.* The same as belemnoides.

Belu′lcum. (From βελος, a dart, and ελκω, to draw out.) A surgeon's instrument for extracting thorns, or darts.

Belu′zzar. *Beluzaar.* The Chaldee word for antidote.

Belzo′e. } See *Styrax Benzoin.*
Belzoi′num. }

Bemcurini. An Indian shrub used in gout.

Bem-ta′mara. (Arab.) The faba Ægyptiaca.

Ben. (Arab.) See *Guilandina moringa.*

Ben ma′gnum. Monardus calls by this name, the avellana purgatrix, which purges and vomits violently.

Ben ta′mara. The Egyptian bean.

Be′nath. (Arab.) Small pustules produced by sweating in the night.

Be′nedict. (From *benedico,* to bless.) A specific name prefixed to many compositions and herbs on account of their supposed good qualities; as benedicta herba, benedicta aqua, &c.

Benedi′cta a′qua. Lime-water was formerly so called: also a water distilled from serpyllum, and, in Schroeder, it is the name for an emetic.

Benedi′cta a′qua compo′sita. Compound lime-water.

Benedi′cta he′rba. See *Geum urbanum.*

Benedi′cta laxati′va. A compound of turbeth, scammony, and spurges, with some warm aromatics.

Benedi′ctum laxati′vum. Rhubarb, and sometimes the lenitive electuary.

Benedi′ctum li′gnum. A term applied to Guaiacum.

Benedi′ctum vi′num. Antimonial wine.

Benedi′ctus ca′rduus. See *Centaurea benedicta.*

Benedi′ctus la′pis. A name for the philosopher's stone.

Beneole′ntia. (From *bene,* well, and *oleo,* to smell.) Sweet-scented medicines, as gums, &c.

Beng. A name given by the Mahomedans to the leaves of hemp, formed into pills, or conserve. They possess exhilarating and intoxicating powers.

Benga′læ ra′dix. (From *Bengal,* its native place.) See *Cassumuniar.*

Benga′l quince. This fruit is the produce of the *Erateva marmelos* of Linnæus; which see.

Benga′lle Indo′rum. (From *Bengal,* its native place.) See *Cassumuniar.*

Be′ngi ei′ri. A species of evergreen, Indian ricinus, which grows in Malabar.

Benit herb. See *Geum urbanum.*

Beni′vi a′rbor. See *Styrax benzoin.*

Benjamin. See *Styrax benzoin.*

Benjamin flowers. See *Benzoic acid.*

BENZO′AS. A benzoate. A salt formed by the union of benzoic acid, with an alkaline, earthy, or metallic base; as benzoate of alumine, &c.

Benzo′e. See *Styrax benzoin.*

Benzo′e amygdaloi′des. See *Styrax benzoin.*

BENZO′IC ACID. *Acidum benzoicum. Flores benzoes. Flores benzoini.* Benjamin flowers. This acid exists in several balsams, but principally in the concrete balsam, called benzoin. (See *Styrax benzoin.*) Chemists have obtained it from this balsam in various ways, either by sublimation, which gives beautiful foliated crystals, but the process requires to be repeated thrice, and the crystals pressed between bibulous paper after each sublimation, to obtain them white and free from any adherent essential oil: or, by forming some of its soluble compounds, and afterwards decomposing them, so as to precipitate the acid; or, by simply boiling the benzoin in water, which dissolves the acid, and, as it cools, allows it to separate again. The London Pharmacopœia directs it to be obtained thus: — "Take of benzoin, a pound and a half: fresh lime, four ounces: water, a gallon and a half: muriatic acid, four fluid ounces. Rub together the benzoin and lime; then boil them in a gallon of the water, for half an hour, constantly stirring; and, when it is cold, pour off the liquor. Boil what remains, a second time, in four pints of water, and pour off the liquor as before. Mix the liquors, and boil down to half, then strain through paper, and add the muriatic acid gradually, until it ceases to produce a precipitate. Lastly, having poured off the liquor, dry the powder in a gentle heat; put it into a proper vessel, placed in a sand bath; and, by a very gentle fire, sublime the benzoic acid." In this process a solution of benzoate of lime is first obtained, by boiling the benzoin and lime in water; the muriatic acid then abstracting the lime precipitates the benzoic acid, which is finally crystallized by sublimation.

The Edinburgh Pharmacopœia forms a benzoate of soda, precipitates the acid by sulphuric acid, and afterwards crystallizes it by solution in hot water, which dissolves a larger quantity than cold.

Benzoic acid has a strong, pungent, aromatic, and peculiar odour. Its crystals are ductile, not pulverizable; it sublimes in a moderate heat, forming a white irritating smoke. It is soluble in about twenty-four times its weight of boiling water, which, as it cools, precipitates 19-20ths of what it had previously dissolved. It is soluble in alkohol.

Benzoic acid is very seldom used in the cure of diseases; but now and then it is ordered as a stimulant against convulsive coughs and difficulty of breathing. The dose is from one grain to five.

It combines with alkaline, metallic, and earthy bodies; and forms benzoates.

Benzoi′fera. See *Styrax benzoin.*

BENZO′INUM. (From the Arabic term *benzoah.*) See *Styrax benzoin.*

Benzo′es flo′res. See *Benzoic acid.*

Benzo′ini magiste′rium. Magistery or precipitate of gum-benjamin.

Benzo′ini o′leum. Oil of benjamin.

BE′RBERIS. (*Berberi,* wild. Arab. used by Averrhoes, and officinal writers.)

1. The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.* The barberry, or pepperidge bush.

2. The pharmacopœial name for the barberry. See *Berberis vulgaris.*

Be′rberis gelati′na. Barberries boiled in sugar.

Be′rberis vulga′ris. The systematic name for the barberry of the pharmacopœias. *Oxycantha Galeni. Spina acida. Crespinus.* This tree, *Berberis pedunculis racemosis, spinis triplicibus,* of Linnæus, is a native of England. The fruit, or berries, which are gratefully acid, and moderately adstringent, are said to be of great use in biliary fluxes, and in all cases where heat, acrimony, and putridity of the humours prevail. The filaments of this shrub possess a remarkable degree of irritability; for on being touched near the base with the point of a pin, a sudden contraction is produced, which may be repeated several times.

Bere′drias. An ointment.

BERENGA′RIUS, James, born about the end of the 15th century at Carpi, in Modena, whence he is often called *Carpus.* He was one of the restorers of anatomy, of which he was professor, first at Padua, afterwards at Bologna, which he was in a few years obliged to quit, being accused of having opened the bodies of two Spaniards alive. By his numerous dissections, he corrected many previous errors concerning the structure of the human body, and paved the way for his successor Vesalius. He was among the first to use mercurial frictions in syphilis, whereby he acquired a large fortune, which he left to the Duke of Ferrara, into whose territory he retired at his death in 1527. His principal works are an enlarged Commentary on Mundinus, and a Treatise on Fracture of the Cranium.

Bereni′ce. (The city from whence it was formerly brought.) Amber.

Bereni′cium. (From φερω, to bring, and νικη, victory.) A term applied by the old Greek writers to nitre, from its supposed power in healing wounds.

Bereni secum. Mugwort. See *Artemisia vulgaris.*

BERGAMO′TE. A species of citron. See *Citrus.*

Beribe′ri. (An Hindostane word signifying a sheep.) *Beriberia.* A species of palsy, common in some parts of the East Indies, according to Bontius. In this disease, the patients lift up their legs very much in the same manner as is usual with sheep. Bontius adds, that this palsy is a kind of trembling, in which there is deprivation of the motion and sensation of the hands and feet, and sometimes of the body.

BERKENHOUT, John, born at Leeds, about the year 1730. His medical studies were commenced late in life, having graduated at Leyden only in 1765; nor did he long continue the practice of medicine. His "Pharmacopœia Medica," however, was very much approved, and has since passed through many editions: his other medical publications are of little importance. He died in 1791.

Bermudas berry. See *Sapindus Saponaria.*

Berna′rvi. An electuary.

Berrio′nis. A name for colophony, or black rosin.

Bers. Formerly the name of an exhilarating electuary.

Be′rula. An old name for brooklime.

Be′rula ga′llica. Upright water parsnep.

Bery′tion. (From *Berytius*, its inventor.) A collyrium described by Galen.

Bes. An eight-ounce measure.

Be′sachar. An obsolete term for a sponge.

Be′sasa. Formerly applied to wild rue.

Besbase. An old name for mace.

Bese′nna. (Arab.) *Muscarum Fungus.* Probably a sponge, which is the nidus of some sorts of flies.

Bessa′nen. (Arab.) A redness of the external parts, resembling that which precedes the leprosy; it occupies the face and extremities. *Avicenna.*

Be′sto. A name in Oribasius for *Saxifrage.*

BE′TA. (So called from the river *Bætis*, in Spain, where it grows naturally; or, according to Blanchard, from the Greek letter βητα, which it is said to resemble when turgid with seed.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* The beet.

2. The pharmacopœial name of the common beet. See *Beta vulgaris.*

Be′ta vulga′ris. The systematic name for the beet of the pharmacopœias. *Beta floribus congestis* of Linnæus. The root of this plant is frequently eaten by the French; it may be considered as nutritious and antiscorbutic, and forms a very elegant pickle with vinegar. The root and leaves, although formerly employed as laxatives and emollients, are now forgotten. A considerable quantity of sugar may be obtained from the root of the beet. It is likewise said, that if beet roots be dried in the same manner as malt, after the greater part of their juice is pressed out, very good beer may be made from them. It is occasionally used to improve the colour of claret.

Betele. *Bethle. Betle. Betelle.* An oriental plant, like the tail of a lizard. It is chewed by the Indians, and makes the teeth black; is cordial and exhilarating, and in very general use throughout the East. It is supposed to be the long pepper.

BETO′NICA. (Corrupted from *Vettonica*, which is derived from the *Veetones*, an antient people of Spain.) Betony.

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.*

2. The pharmacopœial name for the wood betony. See *Betonica officinalis.*

Beto′nica aqua′tica. See *Scrophularia aquatica.*

Beto′nica officina′lis. The systematic name of the betony of the pharmacopœias. *Betonica purpurea. Vetonica cordi. Betonica spica interrupta, corollarum labii lacinia intermedia emarginata* of Linnæus. The leaves and tops of this plant have an agreeable, but weak smell; and to the taste they discover a slight warmth, accompanied with some degree of adstringency and bitterness. The powder of the leaves of betony, snuffed up the nose, provokes sneezing; and hence it is sometimes made an ingredient in sternutatory powders. Its leaves are sometimes smoked like tobacco. The roots differ greatly, in their quality, from the other parts; their taste is very bitter and nauseous; taken in a small dose, they vomit and purge violently, and are supposed to have somewhat in common with the roots of helebore. Like many other plants, formerly in high medical estimation, betony is now almost entirely neglected. Antonius Musa, physician to the Emperor Augustus, filled a whole volume with enumerating its virtues, stating it as a remedy for no less than forty-seven disorders; and hence in Italy the proverbial compliment, *You have more virtues than betony.*

Beto′nica pau′li. A species of veronica.

Beto′nica vulga′ris. The *betonica officinalis* is so called in some pharmacopœias.

Betony, water. See *Scrophularia aquatica.*

BE′TULA. 1. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Tetrandria.* Alder and birch.

2. The pharmacopœial name of the white birch. See *Betula alba.*

Be′tula a′lba. The systematic name for the *betula* of the pharmacopœias. *Betula alba, foliis ovatis, acuminatis, serratis,* of Linnæus. The juice, leaves, and bark have been employed medicinally. If the tree be bored early in the spring, there issues, by degrees, a large quantity of limpid, watery, sweetish juice: it is said that one tree will afford from one to two gallons a-day. This juice is esteemed as an antiscorbutic, deobstruent, and diuretic. The leaves and bark are used externally as resolvents, detergents, and antiseptics.

Be′tula a′lnus. The systematic name for the *alnus* of the pharmacopœias. The common alder, called *Amendanus:* for an account of its virtues, see *Rhamnus frangula.*

Bex. (From βησσω, to cough.) A cough.

Bexu′go. The root of the *Æmatitis Peruviana* of Casper Bauhin; one drachm of which is sufficient for a purge.

Bexagui′llo. A name given to the white ipecacuanha, which the Spaniards bring from Peru, as the Portuguese do the brown from Brazil.

Be′zahan. The fossile bezoar.

Beze′tta cœru′lea. See *Croton tinctorium.*

BE′ZOAR. (From *pa-zahar*, Persian, a destroyer of poison.) *Lapis bezoardicus.* Bezoard. A preternatural or morbid concretion formed in the bodies of land-animals. Several of these kinds of substances were formerly celebrated for their medicinal virtues, and distinguished by the names of the countries from whence they came, or the animal in which they were found. They were considered as powerful alexipharmics, in so much so, that other medicines, possessed, or supposed to be possessed of alexipharmic powers, were called *bezoardics*; and so efficacious were they once thought, that they were bought for ten times their weight in gold. These virtues, however, are in the present day justly denied them, as they produce no other effects than those common to the saline particles which they contain, and which may be given to greater advantage from other sources. A composition of bezoar with absorbent powders, has been much in repute, as a popular remedy for disorders in children, by the name of Gascoigne's powder and Gascoigne's ball; but the real bezoar was rarely, if ever, used for these, its price offering such a temptation to counterfeit it. Some have employed for this purpose, a resinous composition, capable of melting in the fire and soluble in alkohol; but Newmann supposed that those nearest resembling it, were made of gypsum, chalk, or some other earth, to which the proper colour was imparted by some vegetable juice. We understand, however, that tobacco-pipe clay, tinged with ox-gall, is commonly employed, at least for the Gascoigne's powder; this giving a yellow tint to paper, rubbed with chalk, and a green to paper rubbed over with quicklime; which are considered as proofs of genuine bezoar, and which a vegetable juice would not effect.

Be′zoar bovi′num. The bezoar from the ox.

Be′zoar Germa′nicum. The bezoar from the alpine goat.

Be′zoar hy′stricis. *Lapis porcinus. Lapis malacensis. Petro del porco.* The bezoar of the Indian porcupine. Said to be found in the gall-bladder of an Indian porcupine, particularly in the province of Malacca. This concrete differs from others; it has an intensely bitter taste; and on being steeped in water for a very little time, impregnates the fluid with its bitterness, and with aperient, stomachic, and, as it is supposed, with alexipharmic virtues. How far it differs in virtue from the similar concretions found in the gall-bladder of the ox, and other animals, does not appear.

Be′zoar occidenta′le. Occidental bezoar. This concretion is said to be found in the stomach of an animal of the stag or goat kind, a native of Peru, &c. It is of a larger size than the oriental bezoar, and sometimes as large as a hen's egg; its surface is rough, and the colour green, greyish, or brown.

Be′zoar orienta′le. *Lapis bezoar orientalis.* Oriental bezoar stone. This concretion is said to be found in the pylorus, or fourth stomach of an animal of the goat kind, which inhabits the mountains of Persia. It is generally about the size of a kidney bean, of a roundish or oblong figure, smooth, and of a shining olive or dark greenish colour.

Be′zoar microco′smicum. The calculus found in the human bladder.

Be′zoar porci′num. See *Bezoar hystricis.*

Be′zoar si′miæ. The bezoar of the monkey.

Bezoa′rdica ra′dix. See *Dorstenia.*

Bezoa′rdicum jovia′le. *Bezoar* with tin. It differed very little from the *Antihecticum Poterii.*

Bezoa′rdicum luna′le. A preparation of antimony and silver.

Bezoa′rdicum martia′le. A preparation of iron and antimony.

Bezoa′rdicum minera′le. A preparation of antimony, made by adding nitrous acid to butter of antimony.

Bezoa′rdicum satu′rni. A preparation of antimony and lead.

Bezoa′rdicus pu′lvis. The powder of the oriental bezoar.

Bezoa′rticum minera′le. An inert calx of antimony.

Bezoa′rticus spi′ritus ni′tri. The distilled acid of the bezoarticum minerale.

Bezoas. A common chemical epithet.

Biæ′on. Wine of sun-raisins and sea-water.

Bibine′lla. See *Pimpinella.*

Bibito′rius. (*Bibitorius*, sc. *musculus*; from *bibo*, to drink; because by drawing the eye inwards towards the nose, it causes those who drink to look into the cup.) See *Rectus internus oculi.*

BI′CEPS. (From *bis*, twice, and *caput*, a head.) Many muscles have this denomination, from their having two distinct heads, or origins.

Bi′ceps bra′chii. See *Biceps flexor cubiti.*

Bi′ceps cru′ris. See *Biceps flexor cruris.*

Bi′ceps cu′biti. See *Biceps flexor cubiti.*

Bi′ceps exte′rnus. See *Triceps extensor cubiti.*

BI′CEPS FLE′XOR CRU′RIS. *Biceps cruris* of Albinus. *Biceps* of Winslow. Douglas, and Cowper, and *Ischio-femoroperonien* of Dumas. A muscle of the leg, situated on the hind part of the thigh. It arises by two distinct heads; the first, called *longus*, arises in common with the semitendinosus, from the upper and posterior part of the tuberosity of the os ischium. The second, called *brevis*, arises from the linea aspera, a little below the termination of the glutæus maximus, by a fleshy acute beginning, which soon grows broader as it descends to join with the first head, a little above the external condyle of the os femoris.

It is inserted, by a strong tendon, into the upper part of the head of the fibula. Its use is to bend the leg. This muscle forms what is called the outer hamstring; and, between it and the inner, the nervus popliteus, arteria and vena poplitea, are situated.

BI'CEPS FLE'XOR CU'BITI. *Biceps brachii* of Albinus. *Coraco-radialis, seu biceps* of Winslow. *Biceps internus* of Douglas. *Biceps internus humeri* of Cowper. *Scapulo-coracoradial* of Dumas. A muscle of the fore-arm, situated on the fore part of the *os humeri.* It arises by two heads. The first and outermost, called *longus,* begins tendinous from the upper edge of the glenoid cavity of the scapula, passes over the head of the os humeri within the joint, and in its descent without the joint, is inclosed in a groove near the head of the os humeri, by a membranous ligament that proceeds from the capsular ligament and adjacent tendons. The second, or innermost head, called *brevis,* arises, tendinous and fleshy, from the coracoid process of the scapula, in common with the coracobrachialis muscle. A little below the middle of the fore-part of the os humeri, these heads unite. It is inserted by a strong roundish tendon into the tubercle on the upper end of the radius internally. Its use is to turn the hand supine, and to bend the fore-arm. At the bending of the elbow, where it begins to grow tendinous, it sends off an aponeurosis, which covers all the muscles on the inside of the fore-arm, and joins with another tendinous membrane, which is sent off from the triceps extensor cubiti, and covers all the muscles on the outside of the fore-arm, and a number of the fibres, from opposite sides, decussate each other. It serves to strengthen the muscles, by keeping them from swelling too much outwardly when in action, and a number of their fleshy fibres take their origin from it.

Bi'ceps inte'rnus. See *Biceps flexor cubiti.*

Bichi'chiæ. An epithet of certain pectorals, or rather troches, described by Rhazes, which were made of liquorice, &c.

Bi'chos. A Portuguese name for the worms that get under the toe of the people in the Indies, which are destroyed by the oil of cashew nut.

Bi'corn. (*Bicornis:* from *bis,* twice, and *cornu,* an horn.) An epithet sometimes applied to the os hyoides, which has two processes, or horns; and likewise, in former times, to muscles that had two terminations.

BICU'SPIS. (*Bicuspis:* from *bis,* twice, and *cuspis,* a spear.) The name of those teeth which have double points, or fangs. See *Teeth.*

BI'DENS. (From *bis,* twice, and *dens,* a tooth; so called from its being deeply serrated, or indented.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.*

BIDLOO, Godfrey, a celebrated anatomist, born at Amsterdam, in 1649. After practising several years as a surgeon, he was appointed physician to William III. and in 1694, made professor of anatomy and surgery at Leyden. He published 105 very splendid, though rather inaccurate anatomical tables, with explanations; and several minor works. His nephew, *Nicholas,* was physician to the Czar, Peter I.

Bifurcated. (*Bifurcus:* from *bis,* twice, and *furca,* a fork.) A vessel, or nerve, is said to bifurcate when it divides into two branches; thus the bifurcation of the aorta, &c.

Biga'ster. (*Bigaster:* from *bis,* twice, and γαϛηρ, a belly.) A name given to muscles which have two bellies.

Bihe'rnius. (From *bis,* double, and *hernia,* a disease so called.) Having a hernia, or rupture, on each side of the scrotum.

Bila'den. A name of iron.

BILE. (*Bilis.* Nævius derives it from *bis,* twice, and *lis,* contention; as being supposed to be the cause of anger and dispute.) The gall. A bitter fluid, secreted in the glandular substance of the liver; in part flowing into the intestines, and in part regurgitating into the gall-bladder. The secretory organ of this fluid is the penicilli of the liver, which terminate in very minute canals, called biliary ducts. The biliary ducts pour their bile into the *ductus hepaticus,* which conveys it into the *ductus communis choledochus,* from whence it is in part carried into the duodenum. The other part of the bile regurgitates through the cystic duct (see *Gall-bladder,*) into the gall-bladder: for hepatic bile, except during digestion, cannot flow into the duodenum, which contracts when empty; hence it necessarily regurgitates into the gall-bladder. The branches of the *vena portæ* contribute most to the secretion of bile; its peculiar blood, returning from the abdominal viscera, is supposed to be, in some respects, different from other venal blood, and to answer exactly to the nature of bile. It is not yet ascertained clearly whether the florid blood, in the hepatic artery, merely nourishes the liver, or whether, at the same time, it contributes a certain principle, necessary for the formation of bile. It has been supposed, by physiologists, that cystic bile was secreted by the arterial vessels of the gall-bladder; but the fallacy of this opinion is proved by making a ligature on the cystic duct of a living animal. From what has been said, it appears that there are, as it were, two kinds of bile in the human body:—

1. *Hepatic bile,* which flows from the liver into the duodenum: this is thin, of a faint yellow colour, inodorous, and very slightly

bitter, otherwise the liver of animals would not be eatable.

2. *Cystic bile*, which regurgitates from the hepatic duct into the gall-bladder, and there, from stagnating, becomes thicker, the aqueous part being absorbed by lymphatic vessels, and more acrid from concentration. Healthy bile is of a yellow, green colour; of a plastic consistence, like thin oil, and when very much agitated, it froths like soap and water: its smell is fatuous, somewhat like musk, especially the putrefying or evaporated bile of animals: its taste is bitter. The constituent principles of bile are:

1. *Water*, which constitutes the greatest part of bile.

2. *An albuminous principle*, precipitated by alkohol and mineral acids.

3. *A resinous principle*, obtained by evaporating a tincture made of alkohol and bile.

4. *A colouring principle*, which adheres to the resinous part, and gives the colour to bile.

5. *Soda*, in its caustic state: hence healthy bile does not effervesce with acids, and affords a neutral salt.

6. *Phosphate of lime.*

The primary uses of this fluid, so important to the animal economy, are:

1. *To separate the chyle from the chyme:* thus chyle is never observed in the duodenum before the chyme has been mixed with the bile: and thus it is that oil is extricated from linen by the bile of animals.

2. By its *acridity* it excites the peristaltic motion of the intestines; hence the bowels are so inactive in people with jaundice.

3. It imparts a *yellow colour* to the excrements; thus we observe the white colour of the fæces in jaundice, in which disease the flow of bile into the duodenum is entirely prevented.

4. It prevents the *abundance of mucus and acidity* in the primæ viæ; hence acid, pituitous, and verminous saburra are common from deficient or inert bile.

BILGUER, John Ulrick, was born at Coire, in Swisserland. He practised surgery at Berlin with such reputation, that he was appointed by the great Frederick, Surgeon-General to the Prussian army. It was then the general practice to amputate in bad compound fractures; and being struck with the small proportion of those, who recovered after the operation, he was led to try more lenient methods; from which meeting with much better success, he published as a thesis, on graduating at Halle, in 1761, a pretty general condemnation of amputation. This work attracted much notice throughout Europe, and materially checked the unnecessary use of the knife. In his "Instructions for Hospital Surgeons," which appeared soon after, he insisted farther on the same subject; and where amputation was unavoidable, he advised leaving a portion of the integuments, which is now generally adopted.

Bi′liary duct. *Ductus biliosus.* The very vascular *glandules*, which compose almost the whole substance of the liver, terminate in very small canals, called *biliary ducts*, which at length from one trunk, the *ductus hepaticus.* Their use is to convey the bile, secreted by the liver, into the hepatic duct; this uniting with a duct from the gall-bladder, forms one common canal, called the *ductus communis choledochus*, which conveys the bile into the intestinal canal.

Bili′mbi. (Indian.) See *Malus Indica.*

Bi′lious. A term very generally made use of, to express diseases which arise from too copious a secretion of bile: thus bilious colic, bilious diarrhœa, bilious fever, &c.

BI′LIS. See *Bile.*

Bi′lis a′tra. Black bile. The supposed cause among the antients of melancholy.

Bi′lis cy′stica. *Bilis fellea.* Cystic bile. The bile when in the gall-bladder is so called to distinguish it from that which is found in the liver.

Bi′lis hepa′tica. Hepatic bile. The bile when it has not entered the gall-bladder.

Bi′lobus. (From *bis*, double, and *lobus*, the end of the ear.) Having two lobes, resembling the tips of ears.

Bime′stris. (From *bis*, twice, and *mensis*, month.) Two months old.

Bindweed. See *Convolvulus sepium.*

Binga′lle. See *Casumuniar.*

Bino′culus. (From *binus*, double, and *oculus*, the eye.) A bandage for securing the dressings on both eyes.

Bi′nsica. A disordered mind. *Helmont.*

Bi′nsica mors. The binsical, or that death which follows a disordered mind.

Bioly′chnium. (From βιος, life, and λυχνιον, a lamp.) Vital heat: an officinal nostrum.

Bi′ote. (From βιος, life.) Life. Light food.

Biotha′nati. (From βια, violence, or βιος, life, and ϑανατος, death.) Those who die a violent death, or suddenly, as if there were no space between life and death.

Bipemu′lla. See *Pimpinella.*

Bipene′lla. See *Pimpinella.*

Bi′ra. Malt liquor or beer.

Bira′o. Stone parsley.

Birch tree. See *Betula.*

Birdstongue. A name given to the seeds of the *Fraxinus excelsior* of Linnæus.

Bi′rsen. (Heb. an aperture.) A deep ulcer, or imposthume in the breast.

Birthwort, climbing. See *Aristolochia clematitis.*

Bisco′ctus. (From *bis*, twice, and *coquo*, to boil.) Twice dressed. It is chiefly applied to bread much baked, as biscuit.

Biscute′lla. Mustard.

Bise′rmas. A name formerly given to clary, or garden clary.

Bishop's weed. See *Ammi.*

Bisli'ngua. (From *bis*, twice, and *lingua*, a tongue; so called from its appearance of being double-tongued; that is, of having upon each leaf a less leaf.) The Alexandrian laurel.

Bisma'lva. (From *vismalva*, *quasi viscum malva*, from its superior viscidity.) The water, or marsh-mallow.

BI'SMUTH. (*Bismut*, Germ.) *Bismuthum.* A metal which is found in the earth in very few different states, more generally native or in the metallic state. *Native bismuth* is met with in solid masses, and also in small particles dispersed in and frequently deposited on different stones, at Schreeberg in Saxony, Sweden, &c. Sometimes it is crystallized in four-sided tables, or indistinct cubes. It exists combined with oxygen in the *oxide of bismuth* (*bismuth ochre*), found in small particles, dispersed, of a blueish or yellowish-grey colour, needle-shaped and capillary; sometimes laminated, forming small cells. It is also, though more seldom, united to sulphur and iron in the form of a sulphuret in the *martial sulphuretted bismuth ore.* This ore has a yellowish-grey appearance, resembling somewhat the martial pyrites. And, it is sometimes combined with arsenic.

Properties.— Bismuth is of a silver-white colour inclining to red. It soon tarnishes and becomes irridescent. It is brittle and can easily be reduced to small particles. It is soft enough to be cut with a knife. It has a lamellated texture. Its specific gravity is 9.800. It requires less heat for fusion than any other metal, tin excepted, melted by a heat=460 deg. Fahr. It can be volatilized by heat and escapes in the state of greyish-white vapour. It readily unites with mercury and with sulphur. When fused, it exhibits on cooling, cubical figures on the surface. It is soluble in sulphuric, nitric, and muriatic acids. The solution in nitric acid is decomposable by mere dilution with pure water. It inflames in oxygenated muriatic acid gas. It is capable of combining with the greatest number of the metals; and when in certain proportions, promotes their fusibility remarkably. It speedily becomes black by sulphuretted hydrogen gas.

Bismu'thum. (From *bismut*, German.) See *Bismuth.*

BISSET, Charles, was born about the year 1716. After studying at Edinburgh, and practising some years as an Hospital-Surgeon in Jamaica, he entered the army; but soon after settled in Yorkshire, and in 1755, published a Treatise on the Scurvy. But his most celebrated work is an "Essay on the medical Constitution of Great Britain," in 1762. He obtained three years after a diploma from St. Andrews, and reached his 75th year.

Bistort. See *Bistorta.*

BISTO'RTA. (From *bis*, twice, and *torqueo*, to bend; so called from the contortions of its roots.) Bistort. See *Polygonum bistorta.*

Bistoury. (*Bistoire*, French.) Any small knife for surgical purposes.

Bi'thinos. A Galenical plaster.

Bithi'nici emplastrum. A plaster for the spleen.

Bitter apple. See *Cucumis Colocynthis.*

BIT NOBEN. Salt of bitumen. A white saline substance has lately been imported from India by this name, which is not a natural production, but a Hindoo preparation of great antiquity. It is called in the country, *bit noben, padnoon,* and *soucherloon*, and popularly *khala mimuc*, or black salt. Mr. Henderson, of Bengal, conjectures it to be the *sal asphaltites*, and *sal sodomenus* of Pliny and Galen. This salt is far more extensively used in Hindostan than any other medicine whatever. The Hindoos use it to improve their appetite and digestion. They consider it as a specific for obstructions of the liver and spleen; and it is in high estimation with them in paralytic disorders, particularly those that affect the organs of speech, cutaneous affections, worms, old rheumatisms, and indeed all chronic disorders of man and beast.

BITU'MEN. (*ϖιτύμα, ϖιτυς*, pine; because it flows from the pine-tree; or, *quòd vi tumeat è terra*, from its bursting forth from the earth.) Bitumens are combustible, solid, soft, or fluid substances, whose smell is strong, acrid, or aromatic, composed of hydrogen and carbon with a contamination of earth and other substances in small proportions. They are found either in the internal part of the earth, or exuding through the clefts of the rocks, or floating on the surface of waters. Like oils they burn with a rapid flame. Natural historians have divided them into several genera; but modern chemists arrange them according to their chemical properties, and are only acquainted with six species, which are very distinct from each other: these are, naphtha, amber, asphaltos, jet, pit-coal, and petroleum.

Bitu'men barbade'nse. See *Petroleum barbadense.*

Bitu'men juda'icum. *Asphaltus.* Jews' pitch. A solid light bituminous substance, of a dusky colour on the outside, and a deep shining black within; of very little taste, and scarcely any smell, unless heated, when it emits a strong pitchy one. It is said to be found plentifully in the earth in several parts of Egypt, and floating on the surface of the Dead Sea. It is now wholly expunged from the catalogue of officinals of this country; but was formerly esteemed as a discutient, sudorific, and emmenagogue.

Bitu'men li'quidum. See *Petroleum.*

BIVE'NTER. (*Biventer*; from *bis*, twice, and *venter*, a belly.) A muscle is so termed, which has two bellies.

Bive′nter cervi′cis. A muscle of the lower jaw.

Bive′nter maxi′llæ inferio′ris. See *Digastricus*.

Bi′xa orlea′na. The systematic name for the plant affording the *terra orleana* of the pharmacopœias. The substance so called is a ceraceous mass obtained from the seeds of the *Bixa orleana* of Linnæus. In Jamaica and other warm climates, it is considered as a useful remedy in dysentery, possessing adstringent and stomachic qualities.

Bla′cciæ. The measles. *Rhazes.*

Bla′ckberry. The fruit of the common bramble, *Rubus fruticosus* of Linnæus: which see.

BLACKMORE, Sir Richard, was born in Wiltshire about the year 1650. After studying at Oxford, he took his degree in medicine at Padua, then settled in London, and met with considerable success, insomuch that he was appointed physician to William III. and retained the same office under Queen Anne. He then published several long and dull epic poems, which appear to have materially lessened his reputation; so that his opposition to the inoculation for small-pox had very little weight. He wrote also several medical tracts, which are little known at present.

Bladder. See *Urinary bladder*, and *Gall-bladder.*

Bladder, inflamed. See *Cystitis.*

Blade-bone. See *Scapula.*

Blæ′sitas. (From *blæsus.*) A defect in speech, called stammering.

Blæ′sus. (From *βλαπτω*, to injure.) A stammerer.

Bla′nca. (*Blanc*, French.) A purging mixture; so called because it was supposed to evacuate the white phlegmatic humours. Also white lead.

Bla′nca muli′erum. White lead.

BLANCARD, Stephen, was born at Leyden, and graduated at Franeker, in 1678. He settled at Amsterdam, and published many anatomical and medical works; especially one on morbid anatomy, containing 200 cases, and a "Lexicon Medicum," which passed through numerous editions.

Bla′sa. (Indian.) A tree, the fruit of which the Indians powder, and use to destroy worms.

BLASIUS, Gerard, son of a physician at Amsterdam, from whom he derived a great predilection for comparative anatomy. After graduating at Leyden about the year 1646, he returned to his native city, and acquired so much reputation, that he was made professor of medicine in 1660, and soon after physician to the hospital. Besides publishing new editions of several useful works, with notes comprehending subsequent improvements, he was author of various original ones, especially relating to comparative and morbid anatomy. He claimed the discovery of the ductus salivaris, asserting he had pointed it out to Steno; to whom it has been commonly ascribed.

Blaste′ma. (From *βλαςανω*, to germinate.) A bud or shoot. Hippocrates uses it to signify a cutaneous pimple like a bud.

Bla′stum mosylitum. Cassia bark kept with the wood.

Bla′tta. (From *βλαττω*, to hurt.) A sort of beetle, or bookworm; so called from its injuring books and clothes: the kermes insect.

Blatta′ria lu′tea. (From *blatta*; so called, because, according to Pliny, it engenders the blatta.) The herb yellow moth-mullein.

Ble′chon. (From *βληχαομαι*, to bleat; so called according to Pliny, because if sheep taste it they bleat.) The herb wild penny-royal.

Bleeding. See *Blood-letting* and *Hæmorrhage.*

Bleeding at the nose. See *Epistaxis.*

Ble′ma. (From *βαλλω*, to inflict.) A wound.

Ble′nde. A species of zinc ore, formed of zinc in combination with sulphur.

Ble′nna. (*βλεννὰ.*) *Blena.* Mucus, a thick excrementitious humour.

BLENNORRHA′GIA. (From *βλεννα*, mucus, and *ρεω*, to flow.) The discharge of mucus from the urethra.

BLENNORRHŒ′A. (From *βλεννα*, mucus, and *ρεω*, to flow.) *Gonorrhœa mucosa.* A gleet. A discharge of mucus from the urethra, arising from weakness.

Ble′phara. (*Quasi βλεπους φαρος*, as being the cover and defence of the sight.) The eyelids.

Blepha′rides. (From *βλεφαρον.*) The hair upon the eyelids; also the part of the eyelids where the hair grows.

BLEPHAROPHTHA′LMIA. (From *βλεφαρον*, the eyelid, and *οφθαλμλια*, a disease of the eye.) An inflammation of the eyelid.

BLEPHAROPTO′SIS. (From *βλεφαρον*, the eyelid, and *ϖτωσις*, from *ϖιπτω*, to fall.) A prolapse, or falling down of the upper eyelid, so as to cover the cornea.

Blepharo′tis. (From *βλεφαρον*, the eyelid.) An inflammation of the eyelids.

Blepharoxy′ston. (From *βλεφαρον*, the eyelid, and *ξεω*, to scrape off.) A brush for the eyes. An instrument for cleansing or scraping off foul substances from the eyelids.

Blepharo′xysis. (From *βλεφαρον*, the eyelid, and *ξεω*, to scrape off.) The cleansing of the eyelids. Inflammation of the eyelids.

Blessed Thistle. See *Centaurea benedicta.*

Blestri′smus. (From *βαλλω*, to throw about.) Phrenetic restlessness.

Ble′ta. A word used by Paracelsus to signify white, and applied to urine when it is milky, and proceeds from a disease of the kidneys.

Ble'ti. (*Bletus*, from βαλλω, to strike.) Those seized with dyspnœa or suffocation.

BLI'STER. *Vesicatorium. Emplastrum vesicatorium.* A topical application which when put on the skin raises the cuticle in the form of a vesicle, filled with a serous fluid. Various substances produce this effect on the skin; but the powder of the *lytta vesicatoria*, or blistering fly, is what operates with most certainty and expedition, and is now invariably made use of for the purpose.

When it is not wished to maintain a discharge from the blistered part, it is sufficient to make a puncture in the cuticle to let out the fluid; but when the case requires keeping up a secretion of pus, the surgeon must remove the whole of the detached cuticle with a pair of scissars, and dress the excoriated surface in a particular manner. Practitioners used formerly to mix powder of cantharides with an ointment, and dress the part with this composition. But such a dressing not unfrequently occasioned very painful affections of the bladder, a scalding sensation in making of water, and very afflicting stranguries. The treatment of such complaints consists in removing every particle of the fly from the blistered part, making the patient drink abundantly of mucilaginous drinks, giving emulsions and some doses of camphor.

These objections to the employment of salves containing the lytta, for dressing blistered surfaces, led to the use of mezereon, euphorbium, and other irritating substances, which, when incorporated with ointment, form very proper compositions for keeping blisters open, which they do without the inconvenience of irritating the bladder, like the blistering fly. — The favourite application, however, for keeping open blisters, is the savine cerate, which was brought into notice by Mr. Crowther in his book on white swellings. (See *Ceratum Sabinæ.*) On the use of the savine cerate, immediately after the cuticle raised by the blister is removed, says Mr. Crowther, it should be observed that experience has proved the advantage of using the application lowered by a half or two-thirds of the unguentum ceræ. An attention to this direction will produce less irritation and more discharge, than if the savine cerate were used in its full strength. Mr. Crowther says also, that he has found fomenting the part with flannel, wrung out of warm water, a more easy and preferable way of keeping the blistered surface clean, and fit for the impression of the ointment, than scraping the part, as has been directed by others. An occasional dressing of unguentum resinæ flavæ, he has found a very useful application for rendering the sore free from an appearance of slough, or rather dense lymph, which has sometimes been so firm in its texture as to be separated by the probe, with as much readiness as the cuticle is detached after blistering. As the discharge diminishes, the strength of the savine dressing should be proportionably increased. The ceratum sabinæ must be used in a stronger or weaker degree, in proportion to the excitement produced on the patient's skin.

Blister-fly. See *Lytta.*

Bli'tum fœ'tidum. See *Chenopodium vulvaria.*

BLONDEL, James Augustus, was born in England of a French family, and admitted licentiate of the College of Physicians about 1720. He chiefly distinguished himself by controverting, in a very able manner, the opinion then generally received, that marks could be imprinted on the fœtus by the imagination of the mother, and he has the merit of contributing very largely to the removal of this prejudice, which had prevailed for ages, and often produced much mischief.

BLOOD. *Sanguis.* A red homogeneous fluid, of a saltish taste, and somewhat urinous smell, and glutinous consistence, which circulates in the cavities of the heart, arteries, and veins. The quantity is estimated to be about twenty-eight pounds in an adult: of this, four parts are contained in the veins, and a fifth in the arteries. The colour of the blood is red; in the arteries it is of a florid hue, in the veins darker; except only the pulmonary vessels, in which the colour is reversed. Physiology demonstrates, that it acquires this florid colour in passing through the lungs, and from the loss of carbon. The blood is the most important fluid of our body. Some physicians and anatomists have considered it as alive, and have formed many ingenious hypotheses in support of its vitality. The temperature of this fluid is of considerable importance, and appears to depend upon the circulation and respiration. The blood of man, quadrupeds, and birds, is hotter than the medium they inhabit; hence they are termed animals of warm blood; whilst in fishes and reptiles, animals with cold blood, it is nearly of the temperature of the medium they inhabit. The microscope discovers that the blood contains a great number of round globules, which are seen floating about in a yellowish fluid, the serum. The blood also possesses remarkable physical properties; its taste is saltish, and the smell of its halitus or vapour, when recently drawn, is somewhat urinous; it is of a plastic consistence, somewhat glutinous and adhesive.

Chemical analysis of blood, by means of distillation, discovers,

1. A considerable quantity of *insipid water*, which very soon becomes putrid.
2. *Empyreumatic oil.*
3. *Ammoniacal spirit.*
4. *Carbon*, which remains behind, is very spongy, and with great difficulty incinerated. The ashes, however, consist of a small quantity of culinary salt, soda, phosphate of lime, and a very small portion of iron.

While hot, and in motion, the blood remains constantly fluid, and red: when it cools, and is at rest, it takes the form of a fluid mass, which gradually and spontaneously separates into two parts; the one, which is red and floating, becomes of a darker colour, remains concrete, and is called the *cruor*, *crassamentum*, or *cake;* the other, which occupies the lower part of the vessel, is of a yellow-greenish colour, and adhesive, and is called the *serum* or *lymph.*

The CRUOR forms more than one half of the blood; it is very plastic, thick, and, in consistence, like glutinous jelly. It soon putrefies in the temperature of the air; but, dried by a gentle heat, becomes a brittle, dark, red mass. It is insoluble in water; and, when boiled in it, is converted into a hard grumous mass, internally red. The surface of the cruor of the blood, after being exposed in a vessel to atmospheric air, becomes of a florid red colour; but the inferior surface, contiguous to the vessel, is of a deep black: the change of colour on the surface is owing to the oxygen of the atmosphere acting upon the blood. The cruor of the blood is composed of,

1. *Red globules*, which chemistry demonstrates consist of a fibrous gluten and iron. The experiments of the celebrated Rhades shew, that from twenty-five pounds of blood from the human body, near two drachms of the oxide of iron were obtained.

2. The fibrous gluten of the cruor, is that which remains after washing the cruor of blood for a considerable time in cold water, and enclosed in a fine linen cloth; in which case the red globules are washed away. If the red water obtained in this experiment be evaporated, and then distilled to dryness, it leaves behind a carbon, exhibiting, when incinerated, a great quantity of iron, attractable by the magnet. From these experiments it would appear, that the redness of the globules is imparted from the oxidated iron, for which purpose a small quantity is sufficient.

The SERUM of the blood is a lymphatic fluid, almost inodorous; rather saltish to the taste; pellucid, and of a yellowish-green colour; and rather of a plastic consistence. It forms scarcely one half of the blood; and it contains,

1. A large portion of *water;* from forty-seven ounces of serum, forty-three of insipid water were yielded by distillation.

2. *Albuminous gluten*, like the white of an egg, obtained by boiling, or by stirring it with a stick, or by an admixture of alkohol or concentrated mineral acid. If equal parts of water and serum of the blood be coagulated by fire, that part of the serum which is not coagulated, upon being cooled, puts on the appearance of a tremulous jelly.

3. *Carbonated soda*, obtained by pouring a mineral acid upon recent diluted serum.

4. *Culinary salt*, found in the incinerated carbon of blood. The albuminous principle of the serum, more commonly called the coagulable lymph, appears to be of very considerable importance in the animal economy, both in diseased and healthy states of it: it affords, by analysis, carbon, azote, and hydrogen.

The importance of the blood is very considerable; it distends the cavities of the heart and blood-vessels, and prevents them from collapsing; it stimulates to contraction the cavities of the heart and vessels, by which means the circulation of the blood is performed; it generates within itself animal heat, which it propagates throughout the body; it nourishes the whole body: and, lastly, it is that source from which every secretion of the body is separated.

Blood, dragon's. See *Calamus rotang.*

BLOOD-LETTING. Under this term is comprehended every artificial discharge of blood made with a view to cure or prevent a disease. Blood-letting is divided into *general* and *topical.* As examples of the former, *venæsection* and *arteriotomy* may be mentioned; and of the latter, the *application* of *leeches*, *cupping-glasses*, and *scarification.*

Blood, spitting of. See *Hæmoptysis.*

Blood, vomiting of. See *Hæmatemesis.*

Blood-stone. See *Hæmatites.*

Bloody flux. See *Dysenteria.*

BO'A. (From βους, an ox.) A pustulous eruption like the small-pox, so called because it was cured, according to Pliny, by anointing it with hot ox-dung: also the name of a serpent of Calabria; and of the hydroa.

BOCHE'TUM. A decoction of the woods prepared by a second boiling with fresh water.

BO'CHIA. A subliming vessel.

BO'CHIUM. A swelling of the bronchial glands.

BODIES, COMBUSTIBLE. This term is given by chemists to all substances which, on account of their affinity for oxygen, are capable of burning.

BODIES, GASEOUS. See *Gas.*

BODIES, INFLAMMABLE. Chemists give this name to such bodies as burn with facility, and flame in an increased temperature; although, strictly speaking, all combustible bodies are inflammable bodies: such are the diamond, sulphur, bitumens, &c.

BODIES, PHOSPHORESCENT. Bodies which produce light, though their temperature be not increased.

BODY. *Corpus.* The human body is divided by anatomists into the trunk and extremities: *i. e.* the head, and inferior and superior extremities, each of which have certain regions before any part is removed, by which the physician is enabled to direct the application of blisters and the like, and the situation of diseases is better described.

The head is distinguished into the hairy part and the face. The former has five regions, viz. the crown of the head or *vertex*, the fore-part of the head or *sinciput*, the hind-part or *occiput*, and the sides, *partes laterales capitis*. In the latter are distinguished, the region of the forehead, *frons*; temples, or *tempora*; the nose, or *nasus*; the eyes, or *oculi*; the mouth, or *os*; the cheeks, *buccæ*; the chin, or *mentum*; and the ears, or *aures*.

The trunk is distinguished into three principal parts, the neck, thorax, and abdomen. The neck is divided into the anterior region or *pars antica*, in which, in men, is an eminence called *pomum Adami*; the posterior region is called *nucha colli*; and the laterial regions, *partes laterales colli*.

The thorax is distinguished into the anterior region, in which are the *sternum* and *mammæ*, and at whose inferior part is a pit or hollow called *scrobiculus cordis*; a posterior region, called *dorsum*; and the sides, or *latera thoracis*.

The abdomen is distinguished into an anterior region, properly the *abdomen*; a posterior region, called the loins, or *lumbi*; and lateral regions or flanks, called *latera abdominis*. The anterior region of the abdomen being very extensive, is subdivided into the *epigastric*, *hypochondriac*, *umbilical*, and *hypogastric* regions, which are described under their respective names. Immediately below the abdomen is the *mons Veneris*, and at its sides the groins or *inguina*. The space between the organs of generation and the *anus*, or fundament, is called the *perinæum*.

The superior extremity is distinguished into the shoulder, *summitas humeri*, under which is the arm-pit, called *axilla* or *fovea axillaris*; the *brachium*, or *arm*; the *antibrachium*, or fore-arm, in which anteriorly is the bend of the arm, where the veins are generally opened, called *flexura antibrachii*; and posteriorly the elbow, called *angulus cubiti*; and the hand, in which are the *carpus* or wrist, the back or *dorsum manûs*, and the palm or *vola*.

The inferior extremity is divided into, 1. the region of the femur, in which is distinguished the *coxa* or *regio ischiadica*, forming the outer and superior part; 2. the leg, in which are the knee or *genu*, the bend or *cavum poplitis*, and the calf or *sura*; 3. the foot, in which are the outer and inner ankle, or *malleolus externus* and *internus*, the back or *dorsum*, and the sole or *planta*.

Bo'e. (From βοαω, to exclaim.) Clamour, or moaning made by a sick person.

BOERHAAVE, Herman, was born at Voorhout, in Holland, December 31, 1668. His father, the pastor of the village, having nine children, educated them himself, and intending Herman for the church, was careful to ground him well in the learned languages; in which he made such rapid progress, that he was sent at 14 to Leyden. His father dying soon after in slender circumstances, he was fortunately supported by the burgomaster, Daniel Van Alphin; which Boerhaave ever remembered with gratitude. Among other studies, he was very partial to the mathematics, and improved so much, as to be able to give private instructions in them, whereby he partly maintained himself. In 1690, he took his degree in philosophy, and in an inaugural thesis refuted the errors of the materialists. But he soon after turned his mind to the study of medicine, and attended dissections under Nuck; he greatly preferred Hippocrates among the antient, and Sydenham among the modern physicians. He was made doctor of medicine at Harderwyck, in 1693; and in his dissertation on that occasion, insisted on the utility of observing the excretions in disease, especially the urine. He was then engaged in forming a new theory of medicine, by a judicious selection from all that had been before advanced; which was so well arranged, and so ably supported by him, that it became generally adopted, and prevailed throughout Europe for more than half a century. He gave also lectures on chemistry, with considerable reputation, about the same period. The university of Leyden therefore appointed him, in 1701, professor of the theory of medicine; when he read an oration recommending the study of Hippocrates; and, as he declined some very advantageous offers from other parts, they afterwards augmented his salary. About this time, he published another Latin oration, "On the Use of mechanical Reasoning in Medicine," which contributed to extend his fame. In 1709, he was appointed professor of botany, to which study he was ever after eminently attached. On that occasion he produced another oration, maintaining that medicine would be best improved by observation, and by simplicity in prescriptions. His "Aphorisms" had appeared the year before, giving a brief account of the history and cure of diseases, a work universally admired; to which his pupil Van Swieten afterwards attached a very ample commentary. About the same time, he published his "Institutes," treating of physiology. These two works, with successive improvements, passed through numerous editions, and were translated into every European, nay even into the Arabic language. In the year after, he printed a catalogue of the plants in the university garden. In 1714, he was made rector of the university, and at the end of the year for which he held the office, delivered a discourse "On attaining Certainty in Physics." About this period he was made professor of the practice of medicine, and in 1718, of chemistry also. His lectures on these subjects, and on botany, were delivered with such clearness and precision, that students thronged from every part to hear him; insomuch that Leyden could scarcely afford accommodations for them. He was also often consulted in difficult cases by physicians even in distant parts of the world. When appointed to the chemical chair, he had published a short work on that subject; but some of his pupils having printed his lectures without authority, and very incorrectly, he was led to prepare them for the press in 1732. In his conversation, Boerhaave was generally familiar, in his demeanour grave, but disposed to occasional pleasantry: he was distinguished for piety, and on his moral character, his disciple Haller has passed a very high eulogium. Having acquired considerable wealth by his exertions, and being plain in his dress, as well as abstemious in his diet, he was by some accused of parsimony: but he spared no reasonable expense in procuring rare books, and foreign plants. Being of a vigorous constitution, and accustomed to much exercise abroad, he met with little interruption from illness; but in 1729, having become corpulent, and incapable of riding, his health began to suffer, and he was induced to resign his botanical and chemical appointments. In an oration then delivered, he recounted the chief events of his life, expressing himself grateful for the patronage which he had received from individuals; as well as to his own profession, for the little opposition shewn to his opinions. It perhaps never happened, that so great a revolution in science was so readily brought about. The great reputation acquired by his extensive abilities, and the moderation of his character, particularly averse from contention, no doubt contributed materially to this result. In the year following, he was again made rector of the university of Leyden; and also elected a fellow of the Royal Society in London, having been previously admitted to the Royal Academy of Sciences in Paris. The remainder of his life was chiefly occupied in revising his own numerous productions, in publishing more correct editions of several esteemed authors, and in domestic recreations at his seat near Leyden, with his wife and daughter. Towards the end of 1737, he was attacked with symptoms of disease in the chest, which terminated his existence in the September following. His fellow-citizens erected an elegant monument to his memory.

Boethe'ma. (From βοηθεω, to assist.) A remedy.

Boethema'tica. (From βοηθεω, to assist.) Favourable symptoms.

Bog-bean. See *Menyanthes trifoliata.*

Bo'gia gu'mmi. Gamboge.

Bohea tea. See *Thea.*

BOHN, John, was born at Leipsic, in 1640; and after studying in many parts of Europe, graduated there; and was made successively professor of anatomy, and of therapeutics, public physician to the city, &c. Among numerous publications, he chiefly distinguished himself by his "Circulus anatomico physiologicus," and a treatise "De officio medici clinico et forensi," which latter particularly has great merit. He also well explained the judgment to be formed concerning wounds; and recommended purging with calomel in the beginning of small-pox. He died in 1718.

Bois de coissi. See *Quassia.*

Bolar earths. See *Bole.*

BOLE. (Βωλος, a mass.) A friable earthy substance, uniting with water into a smooth paste, adhering to the tongue, and dissolving as it were in the mouth; it is of the argillaceous or clay kind, but more readily imbibing water than the clays strictly so called. Those used in medicine, are the Armenian and French boles. See *Bole Armenian*, and *Bolus Gallica.* Many other bolar earths have been recommended for medicinal uses, and were formerly ranked amongst the officinals; as red boles from Armenia, Lemnos, Strigonium, Portugal, Tuscany, and Livonia; yellow boles from Armenia, Tockay, Silesia, Bohemia, and Blois; white boles from Armenia, Lemnos, Nocera, Eretria, Lamos, Chio, Malta, Tuscany, and Goltberg. Several of these earths have been commonly made into little cakes or flat masses, and stamped with certain impressions; from which circumstance they received the name of *terræ sigillatæ*, or sealed earths.

BOLE, ARMENIAN, *Bolus Armeniæ.* Bole armenic. A pale, but bright red coloured earth, which is occasionally mixed with honey, and applied to children's mouths when afflicted with aphthæ. It forms, like all argillaceous earths, a good tooth-powder, when mixed with some aromatic.

BOLE'TUS. (From *βωλος*, a mass, or *βωλιτης*, from its globular form.)

The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Fungi.* Boletus. Spunk.

Bole'tus ce'rvi. The mushroom.

Bole'tus ignia'rius. The systematic name for the *agaricus* of the pharmacopœias. *Agaricus chirurgorum. Agaricus quercûs. Fungus igniarius.* Agaric of the oak. Touchwood boletus. Female agaric. This fungus *Boletus igniarius — acaulis pulvinatus levis, poris tenuissimis* of Linnæus, has been much used by surgeons as an external styptic. Though still employed on the Continent, the surgeons in this country have not much confidence in it.

Bole'tus la'ricis. The systematic name for the officinal *agaricus albus.* The plant known by this name in the pharmacopœias, is the *Boletus laricis* of Linnæus; so called from its being met with on old larch trees, in different parts of Europe. Several preparations, as troches, an extract, and pills, are ordered to be made with it in foreign pharmacopœias, which are administered against phthisical complaints.

BOLE′TUS PI′NI LA′RICIS. A species of agaric.

BOLE′TUS SUAVE′OLENS. The systematic name for the *fungus salicis* of the pharmacopœias. The species of fungus ordered in some pharmacopœias by this name, is the *Boletus suaveolens; acaulis superne lævis, salicibus*, of Linnæus, and the *Boletus albus* of Hudson. When fresh, it has a suburinous smell, and at first an acid taste, followed by a bitter. It is seldom used at present, but was formerly given in phthisical complaints.

BOLI′SMUS. A voracious appetite, according to Avicenna; but most probably meant for bulimus.

BOLUS. (Βωλος, a bole or bolus.) Any medicine, rolled round, that is larger than an ordinary sized pea, and yet not too large to be swallowed.

BO′LUS ALEXIPHA′RMICA. A preparation of contrayerva.

BO′LUS EX ALU′MINE. Alum, bark, and nutmeg.

BO′LUS A′RMENA. See *Bole, Armenian.*

BOLUS A′RMENA A′LBA. The white armenian bole.

BO′LUS ARMO′NIAC. See *Bole, Armenian.*

BO′LUS BLESSE′NSIS. Bole of Blois. See *Bole.*

BO′LUS GA′LLICA. French bole. A pale red coloured bolar earth, variegated with irregular specks and veins of white and yellow. It is occasionally administered as an absorbent and antacid.

BOMBAX. See *Gossypium.*

BOMBIAS. A bombiate. A salt formed by the union of the bombic acid with different bases; thus *bombiate of alumine*, &c.

BO′MBIC ACID. *Acidum bombicum.* Acid of the silk-worm. Silk-worms contain, especially when in the state of chrysalis, an acid liquor in a reservoir placed near the anus. It is obtained by expressing their juice in a cloth, and precipitating the mucilage by spirit of wine, and likewise by infusing the chrysalides in that liquor. This acid is very penetrating, of a yellow amber colour, but its nature and combinations are not yet well known.

BO′MBUS. (Βομβος.) A resounding noise, or ringing of the ears. Also, a sonorous expulsion of flatus from the intestines.

BON A′RBOR. A name given to the coffee-tree.

BO′NA. *Boona.* The phaseolus, or kidney-bean.

BO′NDUCH INDO′RUM. See *Guilandina.*

BONE. *Os.* Bones are hard, dry, and insensible parts of the body, of a whitish colour, and composed of a spongy, compact, or recticular substance. They vary much in their appearances, some being long and hollow, others flat and compact, &c. The greater number of bones have several processes and cavities, which are distinguished from their figure, situation, use, &c. Thus processes extended from the end of a bone, if smooth and round, are called *heads;* and *condyles*, when flattened either above or laterally. That part which is beneath the head, and which exceeds the rest of the bone in smallness and levity, is called the neck. Rough, unequal processes are called *tuberosities* or tubercles: but the longer and more acute, *spinous* or *styloid* processes, from their resemblance to a thorn. Thin broad processes with sharp extremities, are known by the name of *cristæ*, or *sharp edges.* Other processes are distinguished by their form, and called *alar* or *pterygoid, mamillary* or *mastoid, dentiform* or *odontoid*, &c. Others, from their situation, are called *superior, inferior, exterior*, and *interior.* Some have their name from their direction, as *oblique, straight, transverse*, &c.; and some from their use, as *trochanters, rotators*, &c. *Furrows, depressions*, and *cavities*, are destined either for the reception of contiguous bones, to form an articulation with them, when they are called *articular cavities*, which are sometimes deeper, sometimes shallower; or they receive hard parts, but do not constitute a joint with them. Cavities serve also for the transmission and attachment of soft parts. Various names are given to them, according to the magnitude and figure of bones. If they be broad and large at the beginning, and not deep, but contracted at their ends, they are called *foveæ* or *pits.* Furrows are open canals, extending longitudinally in the surface of bones. A hollow, circular tube, for the most part of the same diameter from beginning to end, and more or less crooked or straight, long or short, is named a *canal. Foramina* are the apertures of canals, or they are formed of the excavated margins of two bones, placed against each other. If such be the form of the margin of a bone, as if a portion were taken out of it, it is called a *notch.*

With respect to the formation of bone, there have been various opinions. Physiologists of the present day assert that it is from a specific action of small arteries, by which ossific matter is separated from the blood, and deposited where it is required. The first thing observable in the embryo, where bone is to be formed, is a transparent *jelly*, which becomes gradually firmer, and is formed into *cartilage.* The cartilage gradually increases to a certain size, and when the process of ossification commences, vanishes as it advances. Cartilages, previous to the ossific action, are solid, and without any cavity; but when the ossific action of the arteries is about to commence, the absorbents become very active, and form a *small cavity* in which the bony matter is deposited; bone continues to be separated, and the absorbents model the mass into its required shape. The process of ossification is extremely rapid in utero: it advances slowly after birth, and is not completed in the human body till about the twentieth year. Ossification in the flat bones, as those of the skull, always begins from *central points*, and the radiated fibres meet the radii of other ossifying points, or the edges of the adjoining bone. In long bones, as those of the arm and leg, the clavicle, metacarpal, and metatarsal bones, a *central ring* is formed in the body of the bone, the head and extremities being cartilage, in the centre of which ossification afterwards begins. The central ring of the body shoots its bony fibres towards the head and extremities, which extend towards the body of the bone. The head and extremities at length come so close to the body as to be merely separated by a cartilage, which becomes gradually thinner until the twentieth year. Thick and round bones, as those of the tarsus, carpus, sternum, and patella, are, at first, all cartilage: ossification begins in the *centre* of each. When the bones are deprived of their soft parts, and are hung together in their natural situation, by means of wire, the whole is termed an *artificial* skeleton; but when they are kept together by means of their ligaments, it is called a *natural* skeleton. — The uses of the bones are various, and are to be found in the account of each bone; it is, therefore, only necessary to observe, in this place, that they give shape to the body, contain and defend the vital viscera, and afford an attachment to all the muscles.

A Table of the Bones.

				No.
Bones of the Head.	Bones of the *cranium* or *skull*		Frontal	1
			Parietal	2
			Occipital	1
			Temporal	2
			Ethmoid	1
			Sphenoid	1
	Bones of the *face*		Superior maxil.	2
			Jugal	2
			Nasal	2
			Lachrymal	2
			Palatine	2
			Inferior spongy	2
			Vomer	1
			Inferior maxil.	1
	Dentes or *teeth*		Incisores	8
			Cuspidati	4
			Molares	20
	Bone of the *tongue*		Hyoides os	1
	Bones of the *ear*, within the temporal bones		Malleus	2
			Incus	2
			Stapes	2
			Orbiculare os	2
Bones of the Trunk.	The *spine.*	Vertebræ	Cervical	7
			Dorsal	12
			Lumbar	5
		Sacrum		1
		Coccygis os		1
	The *thorax*		Sternum	1
			Ribs	24
	The *pelvis*		Innominata ossa	2
Bones of the Upper Extrem.	The *shoulder*		Clavicle	2
			Scapula	2
	The *arm*		Humeri os	2
	The *fore-arm*		Ulna	2
			Radius	2
	The *hand.*	*Carpus* or *wrist*	Naviculare os	2
			Lunare os	2
			Cuneiforme os	2
			Orbiculare os	2
			Trapezium os	2
			Trapezoides os	2
			Magnum os	2
			Unciforme os	2
		Metacarpus		10
		Phalanges		28
Bones of the Low. Extr.	The *thigh*		Femur	2
	The leg		Patella	2
			Tibia	2
			Fibula	2
	The *foot.*	*Tarsus* or *instep*	Calcaneus	2
			Astragalus	2
			Cuboides os	2
			Naviculare os	2
			Cuneiformia ossa	6
		Metatarsus		10
		Phalanges		28
Sesamoid bones of the thumb and great toe, occasionally found				8
			Total	248

Bones, growth of. See *Osteogeny.*

Bonebinder. See *Osteocolla.*

BONET, Theophilus, was born at Geneva in 1620, and graduated at Bologna. He had considerable practice, and was extremely zealous in the pursuit of morbid anatomy, as well as in extracting valuable observations from authors. His hearing becoming impaired, he devoted the latter part of his life to the arrangement of the materials, which he had prepared. His principal work, entitled "Sepulchretum," published 1679, was highly approved; and laid the foundation of Morgagni's excellent treatise, "De Sedibus et Causis Morborum." Another publication of his, "Mercurius compilatitius," is an index of medical literature to the time of its appearance, 1682. His death occurred seven years after.

Bononie'nsis la'pis. The Bononian-stone. Called also *phosphorus bononiensis, phosphorus kircheri*, the light carrier, or Bononian phosphorus. As a medicine the stone is caustic and emetic.

BONTIUS, James, was born at Leyden

where he studied medicine, and then went to practise in India. After his return, he wrote several valuable works on the diseases and practice of that country, as well as on its natural productions, animal and vegetable. The most esteemed is entitled " De Medicina Indorum," and appeared in 1642.

Bo′nus Henri′cus. (*Henricus;* so called because its virtues were detected by some one whose name was Henry.) See *Chenopodium.*

BORACIC ACID. *Acidum boracicum.* Sedative salt of Homberg. Acid of borax. Boracine acid. A concrete salt crystallized in small white scales, which may be obtained from borax, by adding concentrated sulphuric, nitric, muriatic, and even vegetable acids, to a hot solution of borax, till the lixivium becomes somewhat acid: the solution is then to be cooled, when the boracic acid will appear in the shape of bright scales. This acid, in combination with alkalies, earths, and metallic oxides, forms borates.

Bo′rage. See *Borago.*

BORA′GO. (Formerly written *Corago;* from *cor,* the heart, and *ago,* to affect; because it was supposed to comfort the heart and spirits.) Borage.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the officinal borage. See *Borago officinalis.*

Bora′go officina′lis. The systematic name for the borage of the shops. *Buglossum verum. Buglossum latifolium. Borago hortensis.* The leaves and flowers of this plant, *Borago; foliis omnibus alternis, calycibus patentibus* of Linnæus, are esteemed in some countries as refrigerant and cordial. A syrup is prepared from the leaves in France, and used in pleurisies and inflammatory fevers. Their principal use in this island is in that grateful summer beverage, known by the name of cool tankard.

BO′RAS. A borate. A salt formed of boracic acid with an earthy, alkaline or metallic base: as borate of soda, &c.

Bo′ras so′dæ. Borate of soda. See *Borax.*

Bo′rate. See *Boras.*

BO′RAX. (*Borak,* Arab.) *Boras sodæ, sub-boras sodæ.* The obsolete synonyms are *Chrysocolla, capistrum auri, ancinar, boraxtrion, acestis anucar, antincar, tincal, amphitane, baurach, nitrum factitium, santerna,* and *nitrum nativum.* This salt, consisting of boracic acid united with soda, the soda being slightly in excess, is brought from Thibet and Persia, where it is found in a native state. This native or crude borax is called *tincal, tincor, boresh, pounxa,* in the East Indies, and was formerly purified in Europe by the Venetians, when it was called refined or Venetian borax; but it is now prepared by the Dutch by solution in hot water filtration, and careful crystallization. The particular process is not known. Its taste is cool: it is soluble in eighteen parts of cold and six of hot water. It is decomposed by several of the acids. Borax is rarely used internally in modern practice; and according to Murray it does not appear to possess any activity, although it is supposed by some to be, in doses of half a drachm or two scruples, diuretic and emmenagogue. It is occasionally given in cardialgia as an antacid. Its solution is in common use as a cooling gargle, and to detach mucus, &c. from the mouth in putrid fever; and mixed with an equal quantity of sugar, it is used in the form of powder to remove the aphthous crust from the tongue in children. The salts formed by the union of the acid of borax with different bases are called borates.

BORBORY′GMUS. (From βορβορυζω, to make a noise.) The rumbling noise occasioned by flatus in the intestines. It frequently precedes hysterical affections.

BORDEU, Theophilus de, a French physician, born in 1722. He graduated at Montpelier, and was soon after appointed inspector of the mineral waters at Bareges, and professor of anatomy. Subsequently he went to Paris, and was admitted to the faculty there in 1754. He died of apoplexy in his 55th year. His most esteemed work is on the cellular membrane; his distinctions of the pulse appear too nice for practical utility.

BORELLI, John Alphonsus, was born at Castelnuovo, in 1608. He first taught the mathematics in Sicily, then as professor at Pisa; and being soon after admitted to the celebrated academy del Cimento, he formed the design of explaining the functions of animal bodies on mathematical principles. For this purpose he applied himself diligently to dissection. His grand Work, " De Motu Animalium," was published after his death, which happened in 1679, at the expense of Christina, queen of Sweden. The imposing appearance of his opinions gained them many converts at first, but they have been found very defective on maturer examination. He was author of many other publications on different subjects.

Boro′zail. (Æthiop.) An epidemic disease of the Æthiopians, in appearanc similar to the lues venerea.

Borra′go. See *Borago.*

Bo′rri. (Indian.) *Borri-borri. Boberri.* The Indian name for turmeric; also an ointment used there, in which the roots of turmeric are a chief ingredient.

Bo′sa. An Egyptian word for a mass which is made of the meal of darnel, hempseed, and water. It is inebriating.

Bo′smoros. (From βοσκω, to eat, and μορος, a part: because it is divided for food by the mill.) *Bosporas.* A species of meal.

Bota′le fora′men. A name formerly applied to the foramen ovale.

BOTALLUS, Leonard, an eminent physician of Piedmont, flourished about the middle of the 16th century. He graduated at Padua; and attained considerable reputation, as well in surgery as in medicine; having the honour of attending two of the French kings, and the prince of Orange; the latter of whom he cured of a wound, in which the carotid artery had been injured. He published a treatise on gun-shot wounds, which long remained in high estimation. But that which chiefly gained him celebrity was a work on bleeding, general and local, which he recommended to be freely practised in a great variety of diseases, both acute and chronic. His opinions were adopted by many, and carried to an extravagant length, particularly in France: but more enlarged experience has tended greatly to lessen their prevalence.

BO′TANY. (*Botanica, βοτανικη*: from *βοτανη*, an herb or grass.) That part of natural history which considers every thing respecting the natural history of vegetables.

Bota′nicon. (From *βοτανη*, an herb.) A plaster made of herbs, and described by Paulus Ægineta.

Bo′thor. (Arab.) Tumours: pimples in the face: also the small-pox or measles.

Bo′thrion. (From *βοθριον*, a little pit.) *Botrium.* The alveolus or socket for the tooth: also an ulcerated cornea.

Bo′tia. A name given to scrophula.

Bo′tin. A name for turpentine.

Bo′tium. *Bocium.* Indurated bronchial glands.

Botothi′num. The most evident symptom of disease.

Botri′tis. (From *βοτρυς*, a bunch of grapes.) *Botryites.* A sort of burnt cadmia, collected in the top of the furnace, and resembling a bunch of grapes.

Bo′trys. (*βοτρυς*, a cluster of grapes; so called because its seeds hang down like a bunch of grapes.) The oak of Jerusalem.

Bo′trys mexica′na. See *Chenopodium ambrosioides.*

Bo′trys vulga′ris. See *Chenopodium botrys.*

Bo′tus. *Botia. Botus barbatus.* A cucurbit of the chemists.

Bouba′lios. See *Momordica Elaterium,* and *Pudendum muliebre.*

Bou bon. See *Bubo.*

BOUGI′E. (French for wax candle.) *Candela cerea. Candela medicata. Catheteres* of Swediaur. *Cerei medicati* of Le Dran. *Cereolus chirurgorum.* A term applied by surgeons to a long, slender instrument, that is introduced through the urethra into the bladder. Bougies made of the elastic gum are preferable to those made of wax. The caustic bougie differs from the ordinary one in having a thin roll of caustic in its middle, which destroys the stricture, or any part it comes in contact with. Those made of catgut are very seldom used, but are deserving of the attention of the surgeon. Bougies are chiefly used to overcome strictures in the urethra, and the introduction of them requires a good deal of address and caution. They should not be kept in the urethra so long at one time as to excite much pain or irritation. Before their use is discontinued, they should, if practicable, be carried the length of the bladder, in order to ascertain the extent of the strictures, taking care that this be performed not at once, but in a gradual manner, and after repeated trials; for much injury might arise from any hasty or violent efforts to remove the resistance that may present itself. There are bougies also for the œsophagus and rectum.

Bou′limus. (From *βου*, greatly, and *λιμος*, hunger; or from *βουλομαι*, to desire.) A canine or voracious appetite.

Bovi′llæ. (From *bos*, an ox, because cattle were supposed subject to it.) The measles.

Bovi′na fa′mes. The same as bulimia.

Bovi′sta. See *Lycoperdon.*

Box-tree. See *Buxus.*

Brache′rium. (From *brachiale*, a bracelet. A truss or bandage for hernia; a term used by the barbarous Latin writers.

Brachiæ′us mu′sculus. See *Brachialis internus.*

Brachiæ′us exte′rnus. See *Triceps extensor cubiti.*

Brachiæ′us inte′rnus. See *Brachialis internus.*

BRA′CHIAL A′RTERY. *Arteria brachialis.* The brachial artery is the continuation of the axillary artery, which, as it passes behind the tendon of the pectoralis major, receives the name of *brachial.* It runs down on the inside of the arm, over the musculus coraco-brachialis, and anconæus internus, and, along the inner edge of the biceps, behind the vena basilica, giving out small branches as it goes along. Below the bend of the arm it divides into the cubitalis and radialis. Sometimes, though rarely, the *brachial artery* is divided from its origin into two large branches, which run down on the arm, and afterwards on the fore-arm, where they are called *cubitalis* and *radialis.*

Brachia′le. The word means a bracelet; but the antient anatomical writers apply this term to the carpus, the part on which the bracelet was worn.

Brachia′lis. See *Brachialis internus.*

Brachia′lis exte′rnus. See *Triceps extensor cubiti.*

BRACHIA′LIS INTE′RNUS. *Brachiæus* of Winslow, *Brachiæus internus* of Cowper, and *Humero-cubital* of Dumas. A muscle of the fore-arm, situated on the fore part of the os humeri. It arises fleshy from the middle of the os humeri, at each side of the insertion of the deltoid muscle, covering all the inferior and fore-part of this bone, runs over the joint, and adheres firmly to the ligament; is inserted, by a strong short tendon, into the coronoid process of the ulna. Its use is to bend the fore-arm, and to prevent the capsular ligament of the joint from being pinched.

Brachio-cubital ligament. *Ligamentum brachio-cubitale.* The expansion of the lateral ligament, which is fixed in the inner condyle of the os humeri, runs over the capsular, to which it closely adheres, and is inserted like radii on the side of the great sigmoid cavity of the ulna; it is covered on the inside by several tendons, which adhere closely to it, and seem to strengthen it very considerably.

Brachio-radial ligament. *Ligamentum brachio-radiale.* The expansion of the lateral ligament, which runs over the external condyle of the os humeri, is inserted round the coronary ligament, from thence all the way down to the neck of the radius, and also in the neighbouring parts of the ulna. Through all this passage it covers the capsular ligament, and is covered by several tendons adhering closely to both.

Bra′chii os. See *Humeri os.*

BRA′CHIUM. (Βραχιον, the arm.) The arm, from the shoulder to the wrist.

Bra′chium mo′vens qua′rtus. See *Latissimus dorsi.*

Brachu′na. According to Avicenna, a species of furor uterinus.

Brachychro′nius. (From βραχυς, short, and χρονος, time.) A disease which continues but a short time.

Brachypnœ′a. (From βραχυς, short, and ϖνεω, to breathe.) Shortness and difficulty of breathing

Bra′chys. (From βραχυς, short.) A muscle of the scapula.

Bra′cium. Copper. Verdigris.

Bradype′psia. (From βραδυς, slow, and ϖεπτω, to concoct.) Weak digestion. See *Dyspepsia.*

Bra′ggat. A name formerly applied to a ptisan of honey and water.

Brain. See *Cerebrum.*

Brain, little. See *Cerebellum.*

BRAN. *Furfur.* The husks or shells of wheat, which remain in the boulting machine. It contains a portion of the farinaceous matter, and is said to have a laxative quality. Decoctions of bran, sweetened with sugar, are used by the common people, and sometimes with success, against coughs, hoarseness, &c.

Bra′nca. (*Branca*, Span. a foot, or branch.) A term applied to some herbs, which are supposed to resemble a particular foot; as *branca leonis*, lion's foot; *branca ursina*, bear's foot.

Bra′nca leoni′na. See *Alchemilla.*

Bra′nca ursi′na. See *Acanthus* and *Heracleum.*

Bra′nca leo′nis. See *Alchemilla.*

Bra′nchæ. (From βρεχω, to make moist.) *Branchi.* Swelled tonsils, or glandulous tumours, of the fauces, which secrete saliva.

Bra′nchus. (From βρεχω, to moisten.) A defluxion of humours from the fauces.

BRANDY. *Spiritus Gallicus.* A colourless, slightly opaque, and milky fluid, of a hot and penetrating taste, and a strong and agreeable smell, obtained by distilling from wine. It consists of water, ardent spirit, and a small portion of oil, which renders it milky at first, and, after a certain time, colours it yellow. It is the fluid from which rectified or ardent spirit is obtained. Its peculiar flavour depends on the nature of the volatile principles, or essential oil, which come over along with it in the distillation, and likewise, in some measure, upon the management of the fire, the wood of the cask in which it is kept, &c. It is said, that our rectifiers imitate the flavour of brandy, by adding a small proportion of nitrous ether to the spirit of malt, or molasses. The utility of brandy is very considerable, but, from its pleasant taste and exhilarating property, it is too often taken to excess. It gives energy to the animal functions; is a powerful tonic, cordial, and antispasmodic; and its utility with camphire, in gangrenous affections, is very great.

Branks. The name, in Scotland, for the mumps. See *Cynanche parotidæa.*

Brankursine. See *Acanthus.*

Brasi′lia. Brazil wood.

Brasilie′nse li′gnum. See *Hæmatoxylon.*

Brasilie′nsis ra′dix. The ipecacuanha root is sometimes so called.

Bra′sium. (From βρασσω, to boil.) Malt, or germinated barley.

Bra′sma. (From βρασσω, to boil.) The unripe black pepper. Fermentation.

Bra′smos. The same.

Brass. *Æs.* A combination of copper and zinc.

Brassade′lla. *Brassatella.* Ophioglossum, or the herb adder's tongue.

BRA′SSICA. (Varro says, *quasi præsica*; from *præseco*, to cut off; because it is cut from the stalk for use; or from ϖρασια, a bed in a garden where they are cultivated.) Crambe. Cabbage. Colewort. The name of a genus of plants in the Linnæan system.

Bra′ssica a′lba. The white cabbage.

Bra′ssica apia′na. Jagged or crimpled colewort.

Bra′ssica cani′na. The mercurialis sylvestris.

Bra′ssica capita′ta. Cabbage. There are several varieties of cabbage, all of which are generally hard of digestion, producing flatulencies, and afford very little nourishment. These inconveniences are not experienced by those whose stomachs are strong and accustomed to them. Few vegetables run into a state of putrefaction so quickly as cabbages; they ought, therefore, always to be used immediately after cutting. In Holland and Germany there is a method of preserving them, by cutting them into pieces, and sprinkling salt and some aromatic herbs among them; this mass is put into a tub, where it is pressed close, and left to ferment, when it is called *sour crout*, or *sauer kraut*. These, and all pickles of cabbage, are considered as wholesome and antiscorbutic, from the vinegar and spices they contain.

Bra'ssica congylo'des. Turnip cabbage.

Bra'ssica cuma'na. Red colewort.

Bra'ssica eru'ca. The systematic name for the plant which affords the semen erucæ. Garden rocket. Roman rocket. Rocket gentle. The seeds of this plant, *Brassica; foliis lyartis, caule hirsuto siliquis glabris*, of Linnæus, and of the wild rocket, have an acrid taste, and are eaten by the Italians in their pickles, &c. They are said to be good aperients and antiscorbutics, but are eesteemed by the above-mentioned people for their supposed aphrodisiac qualities.

Bra'ssica eruca'strum. *Eruca sylvestris.* Wild rocket. See *Brassica eruca.*

Bra'ssica flo'rida. Cauliflower. A variety of the oleracea.

Bra'ssica gonylico'des. Turnip cabbage.

Bra'ssica lacutu'rria. *Brassica lacuturris.* The savoy plant.

Bra'ssica mari'na. See *Convolvulus soldanella.*

Bra'ssica na'pus. The systematic name for the plant from which the *semen napi* is obtained. *Napus sylvestris. Bunias.* Wild navew, or rape. The seeds yield upon expression a large quantity of oil called rape oil, which is sometimes ordered in stimulating liniments.

Bra'ssica olera'cea. The systematic name for the *brassica capitata* of the shops. See *Brassica capitata.*

Bra'ssica ra'pa. The systematic name for the plant whose root is called turnip. *Rapum. Rapus. Napus. Napus dulcis.* The turnip. Turnips are accounted a salubrious food, demulcent, detergent, somewhat laxative and diuretic, but liable, in weak stomachs, to produce flatulencies, and prove difficult of digestion. The liquor pressed out of them, after boiling, is sometimes taken medicinally in coughs and disorders of the breast. The seeds are occasionally taken as diuretics; they have no smell, but a mild acrid taste.

Bra'ssica ru'bra. Red cabbage. Mr. Watt finds that the red cabbage affords a very excellent test both for acids and alkalies, in which it is superior to litmus, being naturally blue, turning green with alkalies, and red with acids.

Bra'ssica sati'va. The common garden cabbage.

Bra'ssica sabau'da. The savoy plant.

Brasside'llica ars. A way of curing wounds, mentioned by Paracelsus, by applying the herb *Brassidella* to them.

Bra'thu. (Βραθυ.) An old name for savine.

BREAD-FRUIT. The tree which affords this, grows in all the Ladrone Islands in the South sea, in Otaheite, and now in the West Indies. The bread-fruit grows upon a tree the size of a middling oak. The fruit is about the size of a child's head, and the surface is reticulated, not much unlike the surface of a truffle. It is covered with a thin skin, and has a core about the size of a small knife. The eatable part is between the skin and the core: it is as white as snow, and somewhat of the consistence of new bread. It must be toasted before it is eaten, being first divided into three or four parts. Its taste is insipid, with a slight sweetness, nearly like that of wheaten bread and artichoke together. This fruit is the constant food of the inhabitants all the year, it being in season eight months.

BREAST. *Mamma.* The two globular projections, composed of common integuments, adipose substance, and lacteal glands and vessels, and adhering to the anterior and lateral regions of the thorax of females. On the middle of each breast is a projecting portion, termed the *papilla* or *nipple*, in which the excretory ducts of the glands terminate, and around which is a coloured orb, or disc, called the *areola.* The use of the breasts is to suckle new-born infants.

Breast-bone. See *Sternum.*

Bre'gma. (From βρεχω, to moisten; formerly so called because, in infants, and sometimes even in adults, they are tender and moist.) An old name for the parietal bones.

Bre'via. (From *brevis*, short.) A specific name of some parts whose termination is not far from their origin, as *brevia vasa*, the branches of the splenic vein.

Bre'vis mu'sculus. A muscle of the scapula.

Bre'vis cu'biti. A muscle of the forearm.

Brévis exténsor digitórum pédis. See *Extensor brevis digitorum pedis.*

Brévis fléxor póllicis pédis. See *Flexor brevis pollicis pedis.*

Bre'vis perone'us. See *Peroneus brevis.*

Brévis pronátor rádii. See *Pronator radii quadratus.*

Brey'nia. (An American plant named in honour of Dr. Brennius.) A species of capparis.

Briar, wild. See *Rosa canina.*

Bri'cumum. A name which the Gauls gave to the herb artemisia.

Brimstone. See *Sulphur.*

BRISTOL HOT-WELL. *Bristoliensis aqua.* A pure, thermal or warm, slightly acidulated, mineral spring, situated about a mile below Bristol. The fresh water is inodorous, perfectly limpid, and sparkling, and sends forth numerous air bubbles when poured into a glass. It is very agreeable to the palate, but without having any very decided taste, at least none that can be distinguished by a common observer. Its specific gravity is only 1.00077, which approaches so near to that of distilled water, that this circumstance alone would shew that it contained but a very small admixture of foreign ingredients. The temperature of these waters, taking the average of the most accurate observations, may be reckoned at 74 deg.; and this does not very sensible vary during winter or summer. Bristol water contains both solid and gaseous matter, and the distinction between the two requires to be attended to, as it is owing to the very small quantity of solid matter that it deserves the character of a very fine natural spring; and to an excess in gaseous contents, that it seems to be principally indebted for its medical properties, whatever they may be, independent of those of mere water, with an increase of temperature. From the different investigations of chemists, it appears that the principal component parts of the Hotwell water, are a large proportion of carbonic acid gas, or fixed air, and a certain portion of magnesia and lime, in various combinations, with the muriatic, vitriolic, and carbonic acids. The general inference is, that it is considerably pure for a natural fountain, as it contains no other solid matter than is found in almost all common spring water, and in less quantity.

On account of these ingredients, especially the carbonic acid gas, the Hotwell water is efficacious in promoting salutary discharges, in green sickness, as well as in the blind hemorrhoids. It may be taken with advantage in obstructions, and weakness of the bowels, arising from habitual costiveness; and, from the purity of its aqueous part, it has justly been considered as a specific in diabetes, rendering the urinary organs more fitted to receive benefit from those medicines which are generally prescribed, and sometimes successful.

But the high reputation which this spring has acquired, is chiefly in the cure of pulmonary consumption. From the number of unsuccessful cases among those who frequent this place, many have denied any peculiar efficacy in this spring, superior to that of common water. It is not easy to determine how much may be owing to the favourable situation and mild temperate climate which Bristol enjoys; but it cannot be doubted that the Hotwell water, though by no means a cure for consumption, alleviates some of the most harassing symptoms of this formidable disease. It is particularly efficacious in moderating the thirst, the dry burning heat of the hands and feet, the partial night sweats, and the symptoms that are peculiarly hectical; and thus in the earlier stages of phthisis, it may materially contribute to a complete re-establishment of health; and even in the latter periods, mitigate the disease when the cure is doubtful, if not hopeless.

The sensible effects of this water, when drank warm and fresh from the spring, are a gentle glow of the stomach, succeeded sometimes by a slight and transient degree of headache and giddiness. By a continued use, in most cases it is diuretic, keeps the skin moist and perspirable, and improves the appetite and health. Its effects on the bowels are variable. On the whole, a tendency to costiveness seems to be the more general consequence of a long course of this medicinal spring, and therefore the use of a mild aperient is requisite. These effects, however, are applicable only to invalids, for healthy persons, who taste the water at the fountain, seldom discover any thing in it but a degree of warmth, which distinguishes it from the common element.

The season for the Hotwell is generally from the middle of May to October; but as the medicinal properties of the water continue the same throughout the year, the summer months are preferred merely on account of the concomitant benefits of air and exercise.

It should be mentioned, that another spring, nearly resembling the Hotwell, has been discovered at Clifton, which is situated on the summit of the same hill, from the bottom of which the Hotwell issues. The water of Sion-spring, as it is called, is one or two degrees colder than the Hotwell; but in other respects it sufficiently resembles it to be employed for all similar purposes.

Brita'nnica he'rba. See *Rumex hydrolapathum.*

British oil. A variety of the black species of petroleum, to which this name has been given as an empirical remedy.

Bro'ccoli. *Brassica Italica.* As an article of diet, this may be considered as more delicious than cauliflower and cabbage. Sound stomachs digest broccoli without any inconvenience; but in dyspeptic stomachs, even when combined with pepper, &c. it always produces flatulency, and nauseous eructations.

Brochos. (Βροχος, a snare.) A bandage.

Bro'chthus. (From βρεχω, to pour.) The throat; also a small kind of drinking-vessel.

Bro'chus. (Βροκος.) One with a prominent upper-lip, or one with a full mouth and prominent teeth.

BROCKLESBY, Richard, was born in Somersetshire, though of an Irish family, in 1722. After studying at Edinburgh, he graduated at Leyden; then settled in London, but did not advance very rapidly in practice. About 1757, he was appointed physician to the army in Germany, and on his return after six years, published the result of his experience, in a work entitled "Economical and Medical Observations." His success now became more decided, and being prudent in his affairs, and without a family, he realized a considerable fortune. He proved himself however sufficiently liberal, by presenting 1000l. to Mr. Edmund Burke, who had been his school-fellow; and by offering an annuity of 100l. to Dr. Johnson, to enable him to travel, which was not however accepted. He was author of several other works, and died in 1797.

Bro dium. A term in pharmacy, signifying the same with *jusculum*, broth, or the liquor in which any thing is boiled. Thus we sometimes read of *Brodium Salis*, or a decoction of salt.

BRO′MA. (From βρωσκω, to eat.) Food of any kind that is masticated, and not drank.

Broma-theon. (From βρωσκω, to eat.) Mushrooms.

BROMATO′LOGY. (*Bromatologia*: from βρωμα, food, and λογος, a discourse.) A discourse or treatise on food.

Brome′lia ana′nas. The systematic name of the plant which affords the *ananas* fruit, is the *Bromelia foliis ciliato-spinosis, mucronatis, spica comosa* of Linnæus. It is used principally as a delicacy for the table, and is also given with advantage as a refrigerant in fevers.

Brome lia kara′tas. The systematic name of the plant from which we obtain the fruit called penguin, which is given in the Spanish West Indies to cool and quench thirst in fevers, dysenteries, &c. It grows in a cluster, there being several of the size of one's finger together. Each portion is clothed with a husk, containing a white pulpy substance, which is the eatable part; and if it be not perfectly ripe, its flavour resembles that of the pine-apple. The juice of the ripe fruit is very austere, and is made use of to acidulate punch. The inhabitants of the West Indies make a wine of the penguin, which is very intoxicating, and has a good flavour.

BROMFEILD, William, was born in London, 1712; and attained considerable reputation as a surgeon. At the age of twenty-nine he began to give anatomical lectures, which were very well attended. About three years after, in conjunction with the Rev. Mr. Madan, he formed the plan of the Lock Hospital; and so ably enforced the advantages of such an institution, that a sufficient fund was raised for erecting the present building; and it has been since maintained by voluntary contributions. He was appointed surgeon, and held that office for many years: he was also surgeon to St. George's Hospital, and to Her Majesty's household. He wrote many works; the most considerable was entitled "Chirurgical Cases and Observations," in 1773, but reckoned not to answer the expectations entertained of him. He attained his eightieth year.

Bro′mion. (From βρωμος, the oat.) The name of a plaster, made with oaten flour, mentioned by Paulus Ægineta.

Bro′mus ste′rilis. (From βρωσκω, to eat.) The wild oat.

BRO′NCHIA. (*bronchia-orum*, neut. plur. From βρογχος, the throat.) See *Trachea*.

Bronchia′les arte′riæ. Bronchial arteries. Branches of the aorta given off in the chest.

Bronchia′les gla′ndulæ. Bronchial glands. Large blackish glands, situated about the bronchia and trachea, which secrete blackish mucus.

BRONCHOCE′LE. (From βρογχος, the windpipe, and κηλη, a tumour.) *Botium. Hernia gutturis. Guttur tumidum. Trachelophyma. Gossum. Exechebronchos. Gongrona. Hernia bronchialis. Tracheocele.* Derbyshire neck. This disease is marked by a tumour on the forepart of the neck, and seated between the trachea and skin. In general it has been supposed principally to occupy the thyroid gland. We are given to understand that it is a very common disorder in Derbyshire; but its occurrence is by no means frequent in other parts of Great Britain, or in Ireland. Amongst the inhabitants of the Alps, and other mountainous countries bordering thereon, it is a disease very often met with, and is there known by the name of goitre. The cause which gives rise to it, is by no means certain, and the observations of different writers are of very little practical utility. Dr. Saunders controverts the general idea of the bronchocele being produced by the use of snow water. The swelling is at first without pain, or any evident fluctuation; when the disease is of long standing, and the swelling considerable, we find it in general a very difficult matter to effect a cure by medicine, or any external application; and it might be unsafe to attempt its removal with a knife, on account of the enlarged state of its arteries, and its vicinity to the carotids; but in an early stage of the disease, by the aid of medicine a cure may be effected.

Although some relief has been obtained at times, and the disease probably somewhat retarded by external applications, such as blisters, discutient embrocations, and saponaceous and mercurial plasters, still a complete cure has seldom been effected without an internal use of medicine; and that which has always proved the most efficacious, is burnt sponge. The form under which this is most usually exhibited, is that of a lozenge. ℞. spongiæ ustæ ʒss. mucilag. Arab. gum. q. s. fiat trochiscus. When the tumour appears about the age of puberty, and before its structure has been too morbidly deranged, a pill consisting of a grain or two of calomel, must be given for three successive nights; and, on the fourth morning, a saline purge. Every night afterwards for three weeks, one of the troches should, when the patient is in bed, be put under the tongue, suffered to dissolve gradually, and the solution swallowed. The disgust at first arising from this remedy soon wears off. The pills and the purge are to be repeated at the end of three weeks, and the troches had recourse to as before; and this plan is to be pursued till the tumour is entirely dispersed. Some recommend the burnt sponge to be administered in larger doses. Sulphuretted potash dissolved in water, in the proportion of 30 grains to a quart daily, is a remedy which has been employed by Dr. Richter with success, in some cases, where calcined sponge failed. The sodæ subcarbonas being the basis of burnt sponge, is now frequently employed instead of it, and, indeed, it is a more active medicine.

BRONCHO′TOMY. (*Bronchotomia*; from *βρογχος*, the windpipe, and *τεμνω*, to cut.) Tracheotomy. Laryngotomy. This is an operation in which an opening is made into the larynx, or trachea, either for the purpose of making a passage for the air into and out of the lungs, when any disease prevents the patient from breathing through the mouth and nostrils, or of extracting foreign bodies, which have accidentally fallen into the trachea; or, lastly, in order to be able to inflate the lungs, in cases of sudden suffocation, drowning, &c. Its practicableness, and little danger, are founded on the facility with which certain wounds of the windpipe, even of the most complicated kind, have been healed, without leaving any ill effects whatever, and on the nature of the parts cut, which are not furnished with any vessel of consequence.

Bro′nchos. (Βρογχος, the windpipe.) A catarrh; a suppression of the voice from a catarrh.

Bro′nchus. (From *βρεχω*, to pour.) The windpipe. The antients believed that the solids were conveyed into the stomach by the œsophagus, and the fluids by the bronchia; whence its name.

Brooklime Speedwell. See *Veronica beccabunga.*

Broom, common. See *Spartiumscoparium.*

BROWN, John, born in the county of Berwick, in 1735. He made very rapid progress in his youth in the learned languages, and at the age of twenty went to Edinburgh to study theology; but before he could be ordained, became attached to free-living and free-thinking. About 1759 having translated the inaugural thesis of a medical candidate into Latin, and the performance being highly applauded, he was led to the study of medicine. The professors at Edinburgh allowed him to attend their lectures gratuitously; and he maintained himself by instructing the students in Latin, and composing or translating their dissertations. Dr. Cullen particularly encouraged him, notwithstanding his irregularities, employing him as tutor to his sons, and allowing him to repeat and enlarge upon his lectures in the evening to those pupils, who chose to attend. In 1765 he married, and his house was soon filled with boarders; but his imprudence brought on bankruptcy within four years after. About this period he was an unsuccessful candidate for one of the medical chairs; and attributing his failure to Dr Cullen, became his declared enemy. This probably determined him to form his new system of medicine, afterwards published under the title of "Elementa Medicinæ:" in which certainly much genius is displayed, but little acquaintance with practice, or with what had been written before on the subject. His chief object seems to have been to reduce the medical art to the utmost simplicity: whence he arranged all diseases under the two divisions of sthenic and asthenic, and maintained that all agents operate on the body as stimuli; so that we had only to increase or diminish the force of these according to circumstances. At the head of his stimulant remedies he places wine, brandy, and opium; in the recommendation of which he is very liberal: and especially betrays his partiality to them by asserting, contrary to universal experience, that he found them in his own person the best preservatives against the gout. He is said to have prepared himself for his lectures by a large dose of laudanum in whisky; and thus roused himself to a degree of enthusiasm, bordering on frenzy. After completing his work, he procured a degree from St. Andrew's, and commenced public teacher. The novelty and imposing simplicity of his doctrines procured him at first a pretty numerous class: but being irregular in his attendance, and his habits of intemperance increasing, they fell off by degrees: and he was at length so embarrassed, as to be obliged to quit Edinburgh in 1786. He then settled in London, but met with little success, and in about two years after died. His opinions at first found many supporters as well in this as in other countries; but they appear now nearly fallen into deserved oblivion.

BROWNE, Sir Thomas, was born in Cheapside, 1605. After studying and practising for a short time at Oxford, he spent about three years in travelling, graduating at length at Leyden. He then came to London, and published his "Religio Medici;" which excited great attention as a work of genius, though blemished by a few of the popular superstitions then prevailing. He soon after settled at Norwich, and got into very good practice; and was admitted an honorary member of the London College of physicians. In 1646 appeared his most popular work "On Vulgar Errors," which added greatly to his fame; though he injudiciously ranked the Copernican system among them. He was knighted by Charles II.; and died at the termination of his 77th year. His son Edward was also a physician, and attained considerable eminence, having had the honour of attending Charles II. and William III., and being for three years president of the college.

BRU'CEA. (So named by Sir Joseph Banks, in honour of Mr. Bruce, the traveller in Abyssinia, who first brought the seeds thence into England.) The name of a genus of plants in the Linnæan system.

BRU'CEA ANTIDYSENTE'RICA. The systematic name of the plant from which it was erroneously supposed we obtained the angustura bark. See *Cusparia.*

BRU'CEA FERRUGI'NEA. This plant was also supposed to afford the angustura bark.

Bruisewort. See *Saponaria.*

BRUNE'LLA. See *Prunella.*

BRUNNER, JOHN CONRAD, was born in Switzerland in 1653. He obtained his degree in medicine at Strasburg when only nineteen. He afterwards spent several years in improving himself at different universities, particularly at Paris; where he made many experiments on the pancreas, and found that it might be removed from a dog with impunity. On his return he was made professor of medicine at Heidelberg; and gained great reputation, so as to be consulted by most of the princes of Germany. He discovered the mucous glands in the duodenum; and was author of several inconsiderable works. He died in 1727.

BRU'NNER'S GLANDS. *Brunneri glandulæ.* Peyer's glands. The muciparous glands, situated between the villous and cellular coat of the intestinal canal; so named after Brunner, who discovered them.

BRU'NUS. An erysipelatous eruption.

BRU'SCUS. See *Ruscus.*

BRU'TA. (Arab.) Instinct. Savine.

BRU'TIA. An epithet for the most resinous kind of pitch, therefore used to make the *Oleum Picinum.* The *Pix Brutia* was so called from Brutia, a country in the extreme parts of Italy, where it was produced.

BRUTI'NO. Turpentine.

BRU'TOBON. The name of an ointment used by the Greeks.

BRUTUA. See *Cissampelos Pareira.*

BRUXANE'LI. (Indian.) A tall tree in Malabar, whose bark is diuretic, according to Ray.

BRY'GMUS. (From *βρυχω*, to make a noise.) A peculiar kind of noise, such as is made by gnashing or grating the teeth; or, according to some, a certain kind of convulsion affecting the lower jaw, and striking the teeth together, most frequently observed in such children as have worms.

BRYO'NIA. (From *βρυω*, to abound, from its abundance.) Bryony.

1. The name of a genus of plants in the Linnæan system. Class, *Diœcia.* Order, *Syngenesia.*

2. The pharmacopœial name of the white bryony. See *Bryonia alba.*

BRYO'NIA A'LBA. The systematic name of the white bryony plant. *Vitis alba sylvestris. Agrostis. Ampelos. Archeostris. Echetrosis* of Hippocrates. *Bryonia aspera. Cedrostis. Chelidonium. Labrusca. Melothrum. Ophrostaphylon. Psilothrum. Bryonia; foliis palmatis utrinque calloso-scabris* of Linnæus. This plant is very common in woods and hedges. The root has a very nauseous biting taste, and disagreeable smell. Bergius states the virtues of this root to be purgative, hydragogue, emmenagogue, and diuretic; the fresh root emetic. This powerful and irritating cathartic, though now seldom prescribed by physicians, is said to be of great efficacy in evacuating serous humours, and has been chiefly employed in hydropical cases. Instances of its good effects in other chronic diseases are also mentioned, as asthma, mania, and epilepsy. In small doses, it is reported to operate as a diuretic, and to be resolvent and deobstruent. In powder, from ℈j. to a drachm, it proves strongly purgative; and the juice, which issues spontaneously, in doses of a spoonful or more, has similar effects, but is more gentle in its operation. An extract prepared by water, acts more mildly, and with greater safety than the root in substance, given from half a drachm to a drachm. It is said to prove a gentle purgative, and likewise to operate powerfully by urine. Of the expressed juice, a spoonful acts violently both upwards and downwards; but cream of tartar is said to take off its virulence. Externally, the fresh root has been employed in cataplasms, as a resolvent and discutient: also in ischiadic and other rheumatic affections.

BRYO'NIA MECHOACHA'NA NI'GRICANS. A name given to the jalap root.

BRYO'NIA NI'GRA. Black bryony, or vine. The *Tamus communis* of Linnæus.

BRYO'NIA PERUVIA'NA. Jalap.

Bry'ony, black. See *Bryonia nigra.*

Bry'ony, white. See *Bryonia.*

BRY'THION. (Βρυθιον.) A malagma so called, and described by Paulus Ægineta.

BRY'TON. (From *βρυω*, to pour out.) A kind of ale, or wine, made of barley.

BUBASTECO'RDIUM. (From *bubastus* and *cor*, the heart.) A name formerly given to artemisia, or mugwort.

BU'BO. (From *βουϐων*, the groin; because they most frequently happen in that part.) Modern surgeons mean, by this term, a swelling of the lymphatic glands, particularly of those of the groin and axilla. The disease may arise from the mere irritation of some local disorder, when it is called *sympathetic bubo;* from the absorption of some irritating matter, such as the venereal poison; or from constitutional causes, as in the pestilential bubo, and scrophulous swellings, of the inguinal and axillary glands.

BUBON. (From βουβων, the groin, or a tumour to which that part is liable, and which it was supposed to cure.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

Bu'bon ga'lbanum. The systematic name of the plant which affords the officinal galbanum. *Albetad. Chalbane. Gesor.* The plant is also named *Ferula Africana; Oreoselinum Africanum; Anisum fruticosum galbaniferum; Anisum Africanum frutescens;* and *Ayborzat.* Galbanum is the gummi-resinous juice, obtained partly by its spontaneous exudation from the joints of the stem of the Lovage-leaved bubon, *Bubon; foliis rhombeis dentatis striatis glabris, umbellis paucis,* of Linnæus: but more generally, and in greater abundance, by making an incision in the stalk, a few inches above the root, from which it immediately issues, and soon becomes sufficiently concrete to be gathered. It is imported into England from Turkey and the East Indies, in large, softish, ductile, pale-coloured masses, which, by age, acquire a brownish-yellow appearance: these are intermixed with distinct whitish tears, that are the most pure part of the mass. Galbanum has a strong unpleasant smell, and a warm, bitterish, acrid taste. Like the other gummy resins, it unites with water, by trituration into a milky liquor, but does not perfectly dissolve, as some have reported, in water, vinegar, or wine. Rectified spirit takes up much more than either of these menstrua, but not the whole: the tincture is of a bright golden colour. A mixture of two parts of rectified spirit, and one of water, dissolves all but the impurities, which are commonly in considerable quantity. In distillation with water, the oil separates and rises to the surface, in colour yellowish, in quantity one-twentieth of the weight of the galbanum. Galbanum, medicinally considered, may be said to hold a middle rank between assafœtida and ammoniacum; but its fœtidness is very inconsiderable, especially when compared with the former: it is therefore accounted less antispasmodic, nor are its expectorant qualities equal to those of the latter; it however is esteemed more efficacious than either in hysterical disorders. Externally, it is often applied, by surgeons, to expedite the suppuration of inflammatory and indolent tumours, and, by physicians, as a warm stimulating plaster. It is an ingredient in the *pilulæ galbani compositæ,* the *emplastrum galbani compositum* of the London Pharmacopœia, and in the *emplastrum gummosum* of the Edinburgh.

Bu'bon macedo'nicum. The systematic name of the plant which affords the *semen petroselini Macedonici* of the shops. *Apium petræum. Petrapium.* Macedonian parsley. This plant, *Bubon Macedonicum* of Linnæus, is similar in quality to the common parsley, but weaker and less grateful. The seeds enter the celebrated compounds mithridate and theriaca.

Bubo'nium. (From βουβων, the groin.) A name of the golden starwort; so called because it was supposed to be efficacious in diseases of the groin.

BUBONOCE'LE. (From βουβων, the groin, and κηλη, a tumour.) *Hernia inguinalis.* Inguinal hernia, or rupture of the groin. A species of hernia, in which the bowels protrude, at the abdominal ring. See *Hernia.*

Bu'cca. (Heb.) The cheek. The hollow inner part of the cheek, that is inflated by the act of blowing.

Buccacra'ton. (From *bucca,* or *buccella,* and κραω, to mix; that is, a morsel of bread sopped in wine, which served in old times for a breakfast.)

Bu'ccal glands. (*Glandulæ buccinales:* from *bucca,* the cheek.) The small glands of the mouth, under the cheek, which assist in secreting saliva into that cavity.

Bu'ccea. (From *bucca,* the cheek; as much as can be contained at one time within the cheeks.) A mouthful; a morsel; a polypus of the nose.

Buccela'ton. (From *buccella,* a morsel.) A purging medicine, made up in the form of a loaf; consisting of scammony, &c. put into fermented flour, and then baked in an oven.

Bucce'lla. Paracelsus calls by the name of *Buccella,* the carneous excrescence of the polypus in the nose, because he supposes it to be a portion of flesh parting from the bucca, and insinuating itself into the nose. See *Buccea.*

Buccella'tio. (From *buccellatus,* cut into small pieces.) *Bucelatio.* A method of stopping an hemorrhage, by applying small pieces of lint to the vein, or artery.

BUCCINA'TOR. (*Musculus buccinator.* So named from its use in forcing the breath to sound the trumpet; from βουκανον, a trumpet.) *Retractor anguli oris* of Albinus, and *alveolo-maxillaire* of Dumas. The trumpeter's muscle. The buccinator was long thought to be a muscle of the lower jaw, arising from the upper alveoli, and inserted into the lower alveoli, to pull the jaw upwards; but its origin and insertion, and the direction of its fibres, are quite the reverse of this. For this large flat muscle, which forms in a manner the walls of the cheek, arises chiefly from the coronoid process of the lower jaw-bone, and partly also from the end of the alveoli, or socket process of the upper-jaw, close by the pterygoid process of the sphenoid bone: it goes forward, with direct fibres, to be implanted into the corner of the mouth; it is thin and flat, covers in the mouth, and forms the walls of the cheek, and is perforated in the middle of the cheek by the duct of the parotid gland. These are its principal uses: — it flattens the cheek, and so assists in swallowing liquids; — it turns, or helps to turn, the morsel in the mouth, while chewing, and prevents it from getting without the line of the teeth; — in blowing wind-instruments, it both receives and expels the wind; — it dilates like a bag, so as to receive the wind in the cheeks; and it contracts upon the wind, so as to expel the wind, and to swell the note. In blowing the strong wind-instruments, we cannot blow from the lungs, for it distresses the breathing, we reserve the air in the mouth, which we keep continually full; and from this circumstance, as mentioned above, it is named buccinator, from blowing the trumpet.

Bu′ccula. (Dim. of *bucca,* the cheek.) The fleshy part under the chin.

Buce′phalon, red-fruited. The plant so called, is the *Trophis Americana* of Linnæus. Its fruit is a kind of rough red berry, which is eaten by the inhabitants of Jamaica, although its flavour is by no means pleasant.

Bu′ceras. (From *βους*, an ox, and *κερας*, a horn; so called from the horn-like appearance of its seed.) *Buceros.* Fenugreek seed. See *Trigonella Fœnumgræcum.*

BUCHAN, William, was born at Ancram, in 1729. After studying at Edinburgh, he settled in Sheffield, and was soon appointed physician to the Foundling Hospital at Ackworth: but that establishment being afterwards given up, he went to practise at Edinburgh, where he remained several years. During that period he composed his celebrated Work, called "Domestic Medicine," on the plan of Tissot's "Avis aux Peuples;" which has been very extensively circulated, translated into other languages, and obtained the author a gold medal, with a commendatory letter, from the Empress of Russia. It has been objected, that such publications tend to degrade and injure the medical profession; but it does not appear that those, who are properly qualified, can suffer permanently thereby. There seems more foundation for the opinion, that imaginary diseases will be multiplied, and patients sometimes fall victims to their complaints, being treated by those, who do not properly understand them. Dr. Buchan afterwards practised in London, and published some other works; and died in 1805.

Buck-bean. See *Menyanthes trifoliata.*

Buck-thorn. See *Rhamnus catharticus.*

Buck-wheat. See *Polygonum fagopyrum.*

Buck-wheat, eastern. See *Polygonum divaricatum.*

Bucra′nion. (From *βους*, an ox, and *κρανιον*, the head; so called from its supposed resemblance to a calf's snout.) The antirrhinum, or snap-dragon plant.

Bu′cton. The hymen, according to Piræus.

Buga′ntia. Chilblains.

Bugle. See *Prunella.*

Bugloss. See *Anchusa officinalis.*

BUGLO′SSUM. (From *βους*, an ox, and *γλωσσα*, a tongue; so called from the shape and roughness of its leaf.) See *Anchusa officinalis.*

Buglo′ssum sylve′stre. The stone bugloss.

Bu′gula. (A dim. of *buglossa.*) See *Ajuga pyramidalis.*

BULBOCA′STANUM. (From *βολϐος*, a bulb, and *καϛανον*, a chesnut; so called from its bulbous appearance.) See *Bunium bulbocastanum.*

Bulbocaverno′sus. (*Bulbocavernosus,* sc. *musculus:* so called from its origin and insertion.) See *Accelerator urinæ.*

Bu′lbonach. (Germ.) The *Lunaria rediviva* of Linnæus. Satin and honesty. It is said, by Ray, to be a warm diuretic.

Bu′lbus escule′ntus. Such bulbous roots as are commonly eaten are so called.

Bu′lbus vomito′rius. *Muscari. Hyacinthus muscari* of Linnæus. Musk-Grape-flower. Emetic and diuretic, according to Ray.

Bulge-water-tree. The *Geoffroya Jamaicensis.*

BULI′MIA. (From *βου*, a particle of excess, and *λιμος*, hunger.) *Bulimiasis. Boulimos. Bulimus. Bolismos* of Avicenna. *Fames canina. Appetitus caninus. Phagedæna. Adephagia. Bupeina. Cynorexia.* Insatiable hunger, or canine appetite.

Dr. Cullen places this genus of disease in the class *locales,* and order *dysorexiæ;* and distinguishes three species. 1. *Bulimia helluonum;* in which there is no other disorder of the stomach, than an excessive craving of food. 2. *Bulimia syncopalis;* in which there is a frequent desire of food, and the sense of hunger is preceded by swooning. 3. *Bulimia emetica,* also *cynorexia;* in which an extraordinary appetite for food is followed by vomiting. The real causes of this disease are, perhaps, not properly understood. In some cases, it has been supposed to proceed from an acid in the stomach, and in others, from a superabundance of acid in the gastric juice, and from indigested sordes, or worms. Some consider it as depending more frequently on monstrosity than disease. An extraordinary and well-attested case of this disease, is related in the third volume of the Medical and Physical Journal, of a French prisoner, who, in one day, consumed of raw cow's udder 4 lbs., raw beef 10 lbs., candles 2 lbs.; total, 16 lbs.; besides 5 bottles of porter.

Buli′mia addepha′gia. A voracious appetite.

Buli′mia cani′na. A voracious appetite, with subsequent vomiting.

Buli′mia cardia′lgica. A voracious appetite, with heartburn.

Buli′mia convulso′rum. A voracious appetite, with convulsions.

Buli′mia eme′tica. A voracious appetite, with vomiting.

Buli′mia helluo′num. Gluttony.

Buli′mia esuri′gio. Gluttony.

Buli′mia syncopa′lis. A voracious appetite, with fainting, from hunger.

Buli′mia vermino′sa. A voracious appetite, from worms.

Bulimi′asis. See *Bulimia*.

Bu′limus. See *Bulimia*.

Buli′thum. (From βους, an ox, and λιθος, a stone.) A bezoar, or stone, found in the kidneys, or gall, or urinary bladder, of an ox, or cow.

Bu′lla. (A bubble.) A clear vesicle, which arises from burns, or scalds; or other causes.

Bu′llace. The fruit so called, is the produce of the *Prunus insitia* of Linnæus, which grows wild in our hedges. There are two varieties of bullace, the red and the white, which are used with the same intentions as the common damsons.

Bullo′sa fe′bris. An epithet applied to the vesicular fever, because the skin is covered with little vesicles, or blisters. See *Pemphigus*.

Buni′tes vi′num. (From *bunium*, wild parsley.) A wine made of bunium and must.

BU′NIUM. (From βουνος, a little hill; so called from the tuberosity of its root.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

2. The name of the wild parsley.

Bu′nium Bulboca′stanum. The systematic name of a plant whose root is called the pig-nut. *Agriocastanum*. *Nucula terrestris*. *Bulbocastaneum*. *Bulbocastanum majus et minus*. Earth-nut. Hawk-nut. Kipper-nut, and pig-nut. The root is as large as a nutmeg; hard, tuberous, and whitish; which is eaten raw, or roasted. It is sweetish to the taste, nourishing, and supposed to be of use against strangury and bloody urine.

Bu′nius. A species of turnip.

Bupei′na. (From βου, a particle of magnitude, and ϖεινα, hunger.) A voracious appetite.

Bu′phagos. (From βου, a particle of excess, and φαγω, to eat.) The name of an antidote which created a voracious appetite in Marcellus Empiricus.

Buphtha′lmum. (From βους, an ox, and οφθαλμος, an eye; so called from its flowers, which are supposed to resemble an eye.) The herb ox-eye daisy. See *Chrysanthemum leucanthemum*.

Buphtha′lmum cre′ticum. Pellitory of Spain. See *Anthemis Pyrethrum*.

Buphtha′lmum Germa′nicum. The common ox-eye daisy.

Buphtha′lmum ma′jus. Great, or ox-eye daisy. See *Chrysanthemum leucanthemum*.

Buphtha′lmus. (From βους, an ox, and οφθαλμος, an eye; so named from its large appearance, like an ox's eye.)

1. Diseased enlargement of the eye.

2. Houseleek.

BUPLEU′RUM. (From βου, large, and ϖλευρον, a rib; so named from its having large rib-like filaments upon its leaves.)

1. The name of a genus of plants in the Linnæan system.

2. The pharmacopœial name of the herb hare's ear.

Bupleu′rum rotundifo′lium. The systematic name of the plant called perfoliata, in some pharmacopœias. *Bupleuron*. *Bupleuroides*. Round-leaved hare's ear, or thorow wax. This plant, *Bupleurum rotundifolium* of Linnæus, was formerly celebrated for curing ruptures, mixed into a poultice with wine and oatmeal.

Búrdock. See *Arctium Lappa*.

Búrgundy pitch. See *Pinus Abies*.

Bu′rac. (Arab.) Borax. It also means any kind of salt.

Bu′ris. According to Avicenna, a scirrhous hernia, or hard abscess.

BURN, or Scald, denotes a lesion of the animal body, occasioned by the application of heat, but the latter term is applicable only where this is conveyed through the medium of some fluid. The consequences are more or less serious according to the extent of the injury, or the particular part affected: sometimes even proving fatal, particularly in irritable constitutions. The life of the part may be at once destroyed by these accidents, or mortification speedily follow the violent inflammation excited; but when slighter, it usually produces an effusion of serum under the cuticle, like a blister. When the injury is extensive, considerable fever is apt to supervene, sometimes a comatose state; and a remarkable difficulty of breathing often precedes death. In the treatment of these accidents, two very different methods have been pursued. The more ancient plan consists in antiphlogistic means, giving cooling purgatives, &c. and even taking blood, where the irritation is great; employing at the same time cold applications, and where the skin is destroyed emollient dressings; opium was also recommended to relieve the pain, notwithstanding stupor might attend. Mr. Cleghorn, a brewer at Edinburgh, was very successful in these cases by a treatment materially different; first bathing the part with vinegar, usually a little warmed, till the pain abated; then, if there were any destruction of parts, applying poultices, and finely powdered chalk immediately on the sore, to absorb the discharge: in the mean time allowing the patient to live pretty well, and abstaining from active purgatives, &c. More recently, a surgeon at Newcastle of the name of Kentish, has deviated still more from the ancient practice; applying first oil of turpentine, alkohol, &c. heated as much as the sound parts could bear, and gradually lessening the stimulus; in the mean time supporting the patient by a cordial diet, æther, &c. and giving opium largely to lessen the irritation. Now the cases chiefly under his care were of persons scorched very extensively by the explosion of carburetted hydrogen in mines; and probably where the injury is over a large part of the surface, or where the constitution is weakly, it may be hazardous to pursue the antiphlogistic plan, or to use cold applications, which, while intended to keep down action, are wearing out the power of the part. If any extraneous substance be forced into the burnt part, it should be of course removed: and sometimes where a limb is irrecoverably injured, amputation may be necessary.

Bu'rnea. Pitch.

Burnet saxifrage. See *Pimpinella.*

Burning. *Brenning.* An antient medical term, denoting an infectious disease, got in the stews by conversing with lewd women, and supposed to be the same with what we now call the venereal disease.

Bu'rrhi spi'ritus matrica'lis. Burrhus's spirit, for disorders of the womb. A compound of myrrh, olibanum, amber, and spirit of wine.

Burnt hartshorn. See *Cornu ustum.*

Burnt sponge. See *Spongia usta.*

Bu'rsa. A bag.

1. The scrotum.

2. A herb called *Thlaspi bursæ pastoris,* from the resemblance of its seminal follicles to a triangular purse.

BURSA'LOGY. (From βυρσα, a bag, and λογος, a discourse.) The doctrine of the bursæ mucosæ.

BU'RSÆ MUCO'SÆ. Mucous bags, composed of proper membranes, containing a kind of mucous fat, formed by the exhaling arteries of the internal coat. They are of different sizes and firmness, and are connected by the cellular membrane with articular cavities, tendons, ligaments, or the periosteum. The use of the bursæ mucosæ is to secrete, and contain a substance to lubricate tendons, muscles, and bones, in order to render their motion easy.

A Table of all the Bursæ Mucosæ.

In the Head.

1. *A bursa of the superior oblique muscle* of the eye, situated behind its trochlea in the orbit.

2. *The bursa of the digastricus,* situated in the internal surface of its tendon.

3. *A bursa of the circumflexus,* or tensor palati, situated between the hook-like process of the sphenoid bone and the tendon of that muscle.

4. *A bursa of the sterno-hyoideus muscle,* situated between the os hyoides and larynx.

About the Shoulder-joint.

1. *The external acromial,* situated under the acromion, between the coracoid process, deltoid muscle, and capsular ligament.

2. *The internal acromial,* situated above the tendon of the infra-spinatus and teres major: it often communicates with the former.

3. *The coracoid bursa,* situated near the root of the coracoid process; it is sometimes double and sometimes triple.

4. *The clavicular bursa,* found where the clavicle touches the coracoid process.

5. *The subclavian bursa,* between the tendon of the subclavius muscle and the first rib.

6. *The coraco-brachial,* placed between the common origin of this muscle and the biceps, and the capsular ligament.

7. *The bursa of the pectoralis major,* situated under the head of the humerus, between the internal surface of the tendon of that muscle and another bursa placed on the long head of the biceps.

8. *An external bursa of the teres major,* under the head of the os humeri, between it and the tendon of the teres major.

9. *An internal bursa of the teres major,* found within the muscle where the fibres of its tendon diverge.

10. *A bursa of the latissimus dorsi,* between the tendon of this muscle and the os humeri.

11. *The humero-bicipital bursa,* in the vagina of the tendon of the biceps.

There are other bursæ mucosæ about the humerus, but their situation is uncertain.

Near the Elbow-joint.

1. *The radio-bicipital,* situated between the tendon of the biceps, brachialis, and anterior tubercle of the radius.

2. *The cubito-radial,* between the tendon of the biceps, supinator brevis, and the ligament common to the radius and ulna.

3. *The anconeal bursa,* between the olecranon and tendon of the anconeus muscle.

4. *The capitulo-radial bursa,* between the tendon common to the extensor carpi radialis brevis, and extensor communis digitorum and round head of the radius. There

are occasionally other bursæ, but as their situation varies, they are omitted.

About the inferior part of the Fore-arm and Hand.

On the inside of the Wrist and Hand.

1. A *very large bursa*, for the tendon of the flexor pollicis longus.

2. *Four short bursæ* on the fore-part of the tendons of the flexor sublimis.

3. *A large bursa* behind the tendon of the flexor pollicis longus, between it and the fore-part of the radius, capsular ligament of the wrist and os trapezium.

4. *A large bursa* behind the tendons of the flexor digitorum profundus, and on the fore-part of the end of the radius, and fore-part of the capsular ligament of the wrist. In some subjects it communicates with the former.

5. *An oblong bursa* between the tendon of the flexor carpi radialis and os trapezium.

6. *A very small bursa* between the tendon of the flexor carpi ulnaris and os pisiforme.

On the back part of the Wrist and Hand.

7. *A bursa* between the tendon of the abductor pollicis longus and the radius.

8. *A large bursa* between the two extensores carpi radiales.

9. *Another* below it, common to the extensores carpi radiales.

10. *A bursa*, at the insertion of the tendon of the extensor carpi radialis.

11. *An oblong bursa*, for the tendon of the extensor pollicis longus, and which communicates with 9.

12. *A bursa*, for the tendon of the extensor pollicis longus, between it and the metacarpal bone of the thumb.

13. *A bursa* between the tendons of the extensor of the fore, middle, and ring fingers.

14. *A bursa* for the extensors of the little finger.

15. *A bursa* between the tendon of the extensor carpi ulnaris and ligament of the wrist.

There are also bursæ mucosæ between the musculi lumbricales and interossei.

Near the Hip-joint.

On the fore-part of the joint.

1. *The ileo-puberal*, situated between the iliacus internus, psoas magnus, and the capsular ligament of the head of the femur.

2. *The pectineal*, between the tendon of the pectineus and the thigh-bone.

3. *A small bursa* of the gluteus medius muscle, situated between it and the great trochanter, before the insertion of the pyriformis.

4. *A bursa* of the gluteus minimus muscle between its tendon and the great trochanter.

5. *The gluteo-fascial*, between the gluteus maximus and vastus externus.

On the posterior part of the Hip-joint.

6. *The tubero-ischiatic bursa*, situated between the obturator internus muscle, the posterior spine of the ischium, and its tuberosity.

7. *The obturatory bursa*, which is oblong, and found between the obturator internus and gemini muscles, and the capsular ligament.

8. *A bursa of the semi-membranosus*, under its origin and the long head of the biceps femoris.

9. *The gluteo trochanteral bursa*, situated between the tendon of the psoas muscle and the root of the great trochanter.

10. *Two gluteo-femoral bursæ*, situated between the tendon of the gluteus maximus and os femoris.

11. *A bursa of the quadratus femoris*, situated between it and the little trochanter.

12. *The iliac bursa*, situated between the tendon of the iliacus internus and the little trochanter.

Near the Knee-joint.

1. *The supra-genual*, which adheres to the tendons of the vastus and cruralis and the fore-part of the thigh-bone.

2. *The infra-genual bursa*, situated under the ligament of the patella, and often communicating with the above.

3. *The anterior genual*, placed between the tendon of the sartorius, gracilis, and semitendinosus and the internal and lateral ligament of the knee.

4. *The posterior genual*, which is sometimes double, and is situated between the tendons of the semi-membranosus, the internal head of the gastrocnemius, the capsular ligament, and internal condyle.

5. *The popliteal*, conspicuous between the tendon of that muscle, the external condyle of the femur, the semilunar cartilage, and external condyle of the tibia.

6. *The bursa of the biceps cruris*, between the external part of the tendon, the biceps cruris, and the external lateral ligament of the knee.

In the Foot.

On the back, side, and hind-part of the Foot.

1. *A bursa of the tibialis anticus*, between its tendon, the lower part of the tibia, and capsular ligament of the ankle.

2. *A bursa* between the tendon of the extensor pollicis pedis longus, the tibia and capsular ligament of the ankle.

3. *A bursa of the extensor digitorum communis*, between its tendons, the tibia, and ligament of the ankle.

4. *A large bursa*, common to the tendons of the peronei muscles.

5. *A bursa of the peroneus brevis*, proper to its tendon.

6. *The calcaneal bursa*, between the tendo Achillis and os calcis.

In the Sole of the Foot.

1. *A bursa for the tendon of the peroneus longus.*

2. *A bursa* common to the tendon of the flexor pollicis pedis longus, and the tendon of the flexor digitorum pedis communis longus profundus.

3. *A bursa of the tibialis posticus,* between its tendon, the tibia, and astragalus.

4. *Five bursæ for the flexor tendons,* which begin a little above the first joint of each toe, and extend to the root of the third phalanx, or insertion of the tendons.

Bursa′lis mu′sculus. (From its resemblance to a bursa, or purse.) See *Obturator externus et internus.*

Buseli′num. (From βου, great, and σελινον, parsley.) A large species of parsley.

Bu′ssii spi′ritus bezoa′rdicus. The bezoardic spirit of Bussius, an eminent physician at Dresden. A distillation of ivory, sal-ammoniac, amber, &c.

Butchersbroom. See *Ruscus.*

Bu′tiga. A synonym for gutta rosacea.

Bu′tino. Turpentine.

Bu′tomon. See *Iris pseudacorus.*

BUTTER. (*Butyrum:* from βους, a cow, and τυρος, *coagulum,* or cream.) A concrete and soft substance, of a yellow colour, approaching more or less to that of gold, and of a mild, agreeable taste. It melts by a gentle heat, and becomes solid by cooling. Fresh butter is nourishing and relaxing, but it readily becomes sour, and, in general, agrees with few stomachs. Rancid butter is one of the most unwholesome and indigestible of all foods.

Butter-bur. See *Tussilago petasites.*

Butter-flower. See *Ranunculus.*

Butter-milk. The thin and sour milk which is separated from the cream by churning it into butter.

Butterwort. See *Pinguicula.*

Butua. See *Cissampelos pariera.*

BUTY′RUM. See *Butter.*

Buty′rum antimo′nii. See *Murias antimonii.*

BUXTON WATERS. *Buxtonienses aquæ.* Warm mineral springs, which rise in the village of Buxton, in Derbyshire. They have been long celebrated for their medicinal properties. With respect to sensible properties, the Buxton water cannot be distinguished from common spring water, when heated to the same temperature. Its temperature, in the gentleman's bath, is invariably 82°. The principal peculiarity in the appearance of this spring, is a large quantity of elastic vapour, that rises and forms bubbles, which pass through the water, and break as soon as they reach the surface. The air of these bubbles was ascertained, by Dr. Pearson, to consist of azotic gas, mixed with a small proportion of atmospheric air. Buxton water is frequently employed both internally and externally: one of which methods often proves beneficial, when the other would be injurious: but, as a bath alone, its virtues may not be superior to those of tepid common water. As the temperature of 82° is several degrees below that of the human body, a slight shock of cold is felt on the first immersion into the bath; but this is almost immediately succeeded by a pleasing glow over the whole system. It is therefore proper for very delicate and irritable habits. The cases which derive most benefit from the *external* use of Buxton waters, are those in which a loss of action, and sometimes of sensation, affects particular limbs, in consequence of long-continued or violent inflammation, or external injury. Hence the chronic rheumatism succeeding the acute, and where the inflammation has been seated in particular limbs, is often wonderfully relieved by this bath. The *internal* use of the water has been found to be of considerable service in symptoms of defective digestion, and derangement of the alimentary organs. A judicious use of this simple remedy will often relieve the heartburn, flatulency, and sickness; it will increase the appetite, animate the spirits, and improve the health. At first, however, it sometimes occasions a diarrhœa, which is rather salutary than detrimental; but costiveness is a more usual effect, especially in sluggish habits. It also affords great relief when taken internally, in painful disorders of the bladders and kidneys; and has likewise been recommended in cases of gout; but when taken for these complaints, the addition of some aromatic tincture is recommended. In all cases of active inflammation, the use of these waters should be carefully avoided, on account of their supposed heating properties. A full course consists of two glasses, each containing one-third of a pint, before breakfast; which quantity should be repeated between breakfast and dinner. In chronic cases, a long residence on the spot is requisite to ensure the desired effect.

BU′XUS. (From ϖυκαζω, to become hard.) The box tree.

1. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Triandria.*

2. The pharmacopœial name of the *Buxus sempervirens* of Linnæus, the leaves of which possess a very strong, nauseous, bitter taste, and aperient virtues. They are occasionally exhibited, in form of decoction, amongst the lower orders of people, in cases of dropsy and asthma, and worms. As much as will lay upon a shilling, of the common dwarf box, dried and powdered, may be given at bed-time, every night, to an infant.

Bu′xus sempervi′rens. The systematic name of the *buxus* of the pharmacopœias. See *Buxus.*

By′arus. A plexus of blood-vessels in the brain.

Byng. A Chinese name for green tea.

Byre′thrum. (*Beretta*, Ital. or *barette*, Fr. a cap.) *Byrethrus*. An odoriferous cap, filled with cephalic drugs, for the head.

By′rsa. (Βυρσα, leather.) A leather skin, to spread plasters upon.

Bysau′chen. (From βυω, to hide, and αυχην, the neck.) Morbid stiffness of the neck.

By′ssus. (Heb.) A woolly kind of moss. Pudendum muliebre. A kind of fine linen.

By′thos. (Βυθος, deep.) An epithet used by Hippocrates for the bottom of the stomach.

By′zen. (From βυω, to rush together.) In a heap; throngingly. Hippocrates uses this word to express the hurry in which the menses flow in an excessive discharge.

C.

C, In the chemical alphabet, means nitre.

Caa-a′pia. (Indian.) A Brazil root, which, chewed, has nearly the effects of ipecacuanha. It is the *Dorstenia Brasiliensis* of Wildenow. The Brasilians cure the wounds from poisoned darts with the juice of this root, which they pour into the wound.

Caa-atay′a. (Indian.) A bitter plant of Brazil, very powerfully cathartic and emetic. It resembles the euphrasia. *Ray.*

Caaci′ca. (Indian.) A Brazilian herb applied in cataplasms against venomous bites; called also *colubrina Lusitanica. Ray.*

Caa′co. The name of a species of sensitive plant, whose root is used by the natives of America as an antidote to several poisons.

Caaetima′y. *Senecio Brasiliensis.* A decoction of the plant thus called, is used as a wash to cure the itch. Its systematic name is unknown. *Ray.*

Caaghiyu′yo. (Indian.) *Frutex baccifer Brasiliensis.* A shrub of Brazil, whose leaves are applied to ulcers, as desiccative.

Caa-o′pia. (Indian.) *Arbuscula gummifera Brasiliensis. Hypericum bacciferum* of modern naturalists. The name of a tree in the Brasils, whose bark emits a juice, when wounded, which, in a dried state, resembles gamboge, except that it is rather of a darker colour.

Caape′ba. See *Cissampelos pareira.*

Caapo′nga. (Indian.) The Brasilian name for crithmum; also called *Trifolia spica. Crithmum marinum non spinosum. Inula crithmoides* of Linnæus. The leaves and young stalks are pickled for the use of the table, they are gently diuretic.

Caaro′ba. (Indian.) The name of a tree, which grows in the Brasils. A decoction of its leaves promotes perspiration, and is given in the cure of the venereal disease. *Ray.*

Cabali′stica ars. *Cabala. Cabula. Kabala.* The cabalistic art. It is derived from the Hebrew word, signifying to receive by tradition. It is a term that hath been antiently used, in a very mysterious sense, amongst divines; and since, some enthusiastic philosophers and chemists have transplanted it into medicine, importing by it somewhat magical; but such unmeaning terms are now justly rejected.

Cáballine áloes. See *Aloë.*

Cabbage. See *Brassica.*

Cabbage-bark tree. See *Geoffroya Jamaicensis.*

Cabbalistic art. See *Cabalistica ars.*

Caburei′ba. *Caburiiba.* A name of the *Balsamum Peruvianum.* Ray thinks it is the tree which affords that balsam.

Cacago′ga. (From κακκη, excrement, and αγω, to expel.) Cathartics. Ointments which, being rubbed on the fundament, procure stools, according to Paulus Ægineta.

Caca′lia. (From κακον, bad, and λιαν, exceedingly; because it is mischievous to the soil on which it grows.) *Cacamum.* The herb wild chervil, or wild carraways, formerly said to be pectoral.

Cacamotictlano quiloni. (Indian.) *Batatas peregrina.* The purging potatoe.

Ca′camum. See *Cacalia.*

Ca′cao. *Cacoa. Cocoa. Cacavifera. Cacari. Quahoil. Cacavata.* The cocoa or chocolate nut of Virginia and Jamaica.

Cacapho′nia. (From κακος, bad, and φωνη, the voice.) Defective articulation.

Ca′cari. See *Cacao.*

Cacato′ria fe′bris. (From *caco*, to go to stool.) An epithet given by Sylvius to a kind of intermittent fever, attended with copious stools.

Caccio′nde. A sort of pill recommended

by Baglivi against dysenteries; its basis is catechu.

CACHE′XIA. (From *κακος*, bad, and *ἕξις*, a habit.) A bad habit of body, known by a depraved or vitiated state of the solids and fluids.

CACHE′XIÆ. A class of diseases in Cullen's nosology, embracing three orders, viz. *marcores*, *intumescentiæ*, and *impetigines*.

Cache′xia uteri′na. The fluor albus is sometimes so called.

Cache′xia icte′rica. The jaundice, or a disposition thereto.

Ca chlan. The *buphthalmum verum*.

Ca′chlex. A little stone, or pebble. Galen says, that the cachleces, heated in the fire and quenched in whey, become astringents, and useful in dysenteries.

Cachinna′tio. (From *cachinno*, to laugh aloud.) A tendency to immoderate laughter, as in some hysteric and maniacal affections.

Cacho′re. A name for catechu.

Ca′chos. (Indian.) A shrub which the Indians use as a diuretic, and to expel concretions from the kidneys.

CACHU′NDE. A medicine highly celebrated among the Chinese and Indians, made of several aromatic ingredients, perfumes, medicinal earths, and precious stones. They make the whole into a stiff paste, and form out of it several figures, according to their fancy, which are dried for use. These are principally used in the East Indies, but are sometimes brought over to Portugal. In China, the principal persons usually carry a small piece in their mouths, which is a continued cordial, and gives their breath a very sweet smell. It is highly esteemed as a medicine in nervous complaints; and it is reckoned a prolonger of life, and a provocative to venery; the two great intentions of most of the medicines used in the East.

Ca′chrys. Galen says it sometimes means parched barley. In Linnæus's botany, it is the name of a genus of which he enumerates three species.

Ca′chrys odonta′lgica. A plant, the root of which may be substituted for that of the pyrethrum.

Cachy′mia. (Κακυμια.) An imperfect metal, or an immature metalline ore, according to Paracelsus.

Cacoalexite′rium. (From *κακος*, bad, and *αλεξιτηρεω*, to preserve.) An antidote to poison or against infectious diseases. Alexipharmics.

Cacocho′lia. (From *κακος*, and *χολη*, bile.) An indisposition, or disease of the bile.

Cacochy′lia. (From *κακος*, bad, and *χυλη*, the chyle.) Indigestion, or depraved chylification.

CACOCHY′MIA. (From *κακος*, bad, and *χυμος*, juice, or humour.) A diseased or depraved state of the humours.

Cacocne′mus. (From *κακος*, bad, and *κνημη*, the leg.) Having a natural defect in the tibia.

Cacocore′ma. (From *κακος*, bad, and *κορεω*, to purge or cleanse.) A medicine which purges off the vitiated humours.

Cacodæ′mon. (From *κακος*, bad, and *δαιμων*, a spirit.) An evil spirit, or genius, which was supposed to preside over the bodies of men, and afflict them with certain disorders. The night-mare.

Caco′dia. (From *κακος*, bad, and *ωζω*, to smell.) A defect in the sense of smelling.

Cacoe′thes. (From *κακος*, ill, and *ηθος*, a word which, when applied to diseases, signifies a quality, or a disposition.) Hippocrates applied this word to malignant and difficult distempers. Galen, and some others, express by it an incurable ulcer, that is rendered so through the acrimony of the humours flowing to it. Linnæus and Vogel use this term much in the same sense with Galen, and describe the ulcer as superficial, spreading, weeping, and with callous edges.

Cacopa′thia. (From *κακος*, bad, and *ϖαθος*, affection.) An ill affection of the body, or part.

Cacopho′nia. (From *κακος*, bad, and *φωνη*, the voice.) A defect in the organs of speech; a bad pronunciation.

Cacopra′gia. (From *κακος*, bad, and *ϖραττω*, to perform.) Diseased chylopoietic viscera.

Cacorry′thmus. (From *κακος*, bad, and *ρυθμος*, order.) A disordered pulse.

Caco′sis. (From *κακος*, bad.) A bad disposition of body.

Cacosi′tia. (From *κακος*, and *σιτιον*, food.) An aversion to food, or nausea.

Cacosphy′xia. (From *κακος*, bad, and *σφυξις*, pulse.) A disorder of the pulse.

Ca′costo′machus. (From *κακος*, bad, and *ϛομαχος*, the stomach.) A bad or disordered stomach; also food which the stomach rejects.

Caco′stomus. (From *κακος*, bad, and *ϛομα*, a mouth.) Having a bad formed, or disordered mouth.

Cacothy′mia. (From *κακος*, ill, and *ϑυμος*, the mind.) Any vicious disposition of the mind; or a diseased mind.

Cacotro′phia. (From *κακος*, ill, and *τροφη*, nutriment.) A vitiated nourishment; a wasting of the body, through a defect of nutrition.

CA′CTUS. The name of a genus of plants in the Linnæan system. Class, *Icosandria*. Order, *Monogynia*. The melon-thistle.

Ca′ctus opu′ntia. The systematic name of the plant bearing the epithet opuntia in the pharmacopœias. The prickly leaves of this plant abound with a mucilaginous matter, which is esteemed in its native countries an emollient, in the form of poultice.

Cacu′balus. (From *κακος*, evil, and *βαλλω*, to cast out; so named because it was thought to be efficacious in expelling poisons.) The berry-bearing chickweed.

Ca′cule. The Arabian term for cardamoms.

CACU′MEN. (*-minis*, neut.) The top or point.

CADA′VER. (*-veris*, neut. From *cado*, to fall; because the body, when deprived of life, falls to the ground.) A carcase. A body deprived of life.

Ca′dmia. (Heb.) *Chlimia. Catimia.* A name given to the lapis calaminaris. See *Zinc.*

Ca′dmia meta′llica. A name given, by the Germans, to cobalt.

CADOGAN, William, graduated at Oxford in 1755. Five years before, he had published a small treatise on the management of children, which was very much approved. In 1764 his "Dissertation on the Gout and all Chronic Diseases" appeared, which attracted considerable attention, being written in a popular style. He referred the gout principally to indolence, vexation, and intemperance; and his plan of treatment is generally judicious. He was a fellow of the London College of Physicians, and died in 1797, at an advanced age.

Cadu′ca. (From *cado*, to fall down.) See *Decidua.*

Cadu′cus mo′rbus. (From *cado*, to fall down.) The epilepsy or falling sickness.

Cæ′citas. (From *cæcus*, blind.) Blindness. See *Caligo*, and *Amaurosis.*

CÆ′CUM. (From *cæcus*, blind.) The cæcum, or blind gut; so called from its being perforated at one end only. The first portion of the large intestines, placed in the right iliac region, about four fingers' breadth in length. It is in this intestine that the ileum terminates by a valve, called the valve of the cæcum. The *appendicula cæci vermiformis* is also attached to it. See *Intestines.*

CÆ′LIUS Aurelia′nus, is supposed to have been born at Sicca, in Africa, and is referred by Le Clerc to the fifteenth century, from the harshness of his style. He has left a Latin translation of the writings of Soranus, with additional observations, partly collected from others, partly from his own experience. The work is in eight books, three on acute, the rest on chronic disorders. He treats of several diseases not mentioned by any earlier writers, and has some observations in surgery peculiar to himself; he appears too generally judicious in his remarks on the opinions of others.

Cæ′ros. (*Καιρος.*) Hippocrates, by this word, means the opportunity or moment in which whatever is to be effected should be done.

CÆSALPI′NUS, Andrew, was born in Tuscany in 1519. He graduated at Pisa, and become professor in anatomy and medicine there; and was afterwards made physician to Pope Clement VIII. He died in 1603. His works are numerous, and evince much genius and learning. In 1571 he published a work, defending the philosophy of Aristotle against the doctrines of Galen, from some passages in which he appears to have approached very near to a knowledge of the circulation of the blood; having explained the use of the valves of the heart, and pointed out the course which these compelled the blood to take on both sides during the contraction and dilatation of that organ. In a treatise "De Plantis," he justly compared the seeds to the eggs of animals; and formed an arrangement of them according to the parts of fructification. On medical subjects also he offered many judicious remarks.

CÆSA′RIAN OPERA′TION, (So called because Julius Cæsar is said to have been extracted in this manner.) *Hysterotomia. Hysterotomatocia.* The operation for extracting the fœtus from the uterus, by dividing the integuments of the abdomen and the uterus.

There are three cases in which this operation may be necessary. — 1. When the fœtus is perceived to be alive, and the mother dies, either in labour or in the last two months. 2. When the fœtus is dead, but cannot be delivered in the usual way, from the deformity of the mother, or the disproportionate size of the child. 3. When both the mother and the child are living, but delivery cannot take place, from the same causes as in the second instance. Both the mother and the child, if accounts can be credited, have often lived after the Cæsarian operation, and the mother even borne children afterwards. Heister gives a relation of such success, in his Institutes of Surgery; and there are some others. In England, the Cæsarian operation has almost always failed. Mr. James Barlow, of Chorley, Lancashire, succeeded, however, in taking a fœtus out of the uterus by this bold proceeding, and the mother was perfectly restored to health.

Cæ′sares. *Cæsones.* Children who are brought into the world by the Cæsarian operation.

Cæ′tchu. See *Acacia catechu.*

Caf. (Arab.) *Cafa. Caffa.* A name given by the Arabians to camphire.

Caga′strum. A barbarous term used by Paracelsus, to express the morbific matter which generates diseases.

Ca′jan. *Cayan.* The *Phaseolus creticus* of Linnæus. A decoction of the leaves restrains the hæmorrhoids when excessive. *Ray.*

Ca′jeput oil. See *Melaleuca.*

CAIUS, John, was born at Norwich in 1510. After studying at Cambridge, and in different parts of Italy, and distinguishing himself by his interpretations of Hippocrates, Galen, and other ancient authors, he graduated at Bologna. In 1544, he returned to this country, and for some time read lectures in anatomy to the corporation of surgeons in London. He afterwards practised at Shrewsbury, having been admitted a fellow of the College of Physicians; and published a popular account of the memorable sweating sickness, which prevailed in 1551, subsequently reprinted, much improved, in Latin. He was made physician to Edward VI., to Mary and to Elizabeth. On the death of Linacre, he was chosen President of the College of Physicians, and during the seven years, for which he held that office, performed many important services. He was also a signal benefactor to Gonvil Hall, where he studied at Cambridge, having obtained permission to erect it into a college, considerably enlarging the building, and assigning provision for three fellows and twenty scholars. He was chosen master on the completion of the improvements, and retained that office till near the period of his death, which happened in 1573. He published a dissertation "De Canibus Britannicis," which Mr. Pennant has entirely followed in his British Zoology, and some other learned works besides those already mentioned.

Cala′ba. The Indian mastich tree. *Catophyllum inophyllum* of Linnæus, a native of America, accounted vulnerary, resolvent, and anodyne.

Calagua′læ radix. *Calaguelæ radix.* The root so called is knotty, and somewhat like that of the polypody tribe. It has been exhibited internally at Rome, with success, in dropsy; and it is said to be efficacious in pleurisy, contusions, abscesses, &c. It was first used in America, where it is obtained; and Italian physicians have since written concerning it, in terms of approbation.

Calamagro′stis. (From *καλαμος*, a reed, and *αγρωϛις*, a sort of grass.) Sheer grass. Reed grass.

Cala′mbac. (Indian.) The agallochum, or aromatic aloe.

Calama′corus. Indian reed.

Calame′don. (From *καλαμος*, a reed.) A sort of fracture which runs along the bone, in a straight line, like a reed, but is lunated in the extremity.

CA′LAMINA PRÆPARA′TA. Prepared calamine. Burn the calamine, and reduce it to powder; then let it be brought into the state of a very fine powder, in the same manner that chalk is directed to be prepared. See *Calamine.*

CA′LAMINE. (From *calamus*, a reed; so called from its reed-like appearance.) *Cadmia. Cathmia. Cadmia lapidosa ærosa. Cadmia fossilis. Calamina. Lapis calaminaris.* An ore of zinc. A sort of stone, or mineral, containing oxide of zinc and carbonic acid, united with a portion of iron, and sometimes other substances. It is very heavy, moderately hard and brittle, of a gray, yellowish, red, or blackish brown; found in quarries of considerable extent, in several parts of Europe, and particularly in this country, in Derbyshire, Gloucestershire, Nottinghamshire, and Somersetshire; as also in Wales. The calamine of England is, by the best judges, allowed to be superior in quality to that of most other countries. It seldom lies very deep, being chiefly found in clayey grounds, near the surface. In some places it is mixed with lead ores. This mineral is an article in the materia medica; but, before it comes to the shops, it is usually roasted, or calcined, to separate some arsenical or sulphureous particles which, in its crude state, it is supposed to contain, and in order to render it more easily reducible into a fine powder. In this state, it is employed in collyria, for weak eyes, for promoting the cicatrization of ulcers, and healing excoriations of the skin. It is the basis of an officinal cerate, called Ceratum calaminæ, by the London College, formerly called ceratum lapidis calaminaris, ceratum epuloticum; and ceratum carbonatis zinci impuri by the Edinburgh College. These compositions form the cerate which Turner strongly recommends for healing ulcerations and excoriations, and which have been popularly distinguished by his name. The collyria in which the prepared calamine has been employed, have consisted simply of that substance added to rose-water, or elder-flower water.

Calamint, common. See *Melissa calamintha.*

Calamint, mountain. See *Melissa grandiflora.*

CALAMI′NTHA. (From *καλος*, beautiful, or *καλαμος*, a reed, and *μινθη*, mint.) Common calamint. See *Melissa.*

Calami′ntha a′nglica. See *Melissa nepeta.*

Calami′ntha humi′lior. The ground-ivy.

Calami′ntha ma′gno flo′re. See *Melissa grandiflora.*

Calami′ntha monta′na. See *Melissa Calamintha.*

CA′LAMUS. A word of Arabian derivation.

1. A general name denoting the stalk of any plant.

2. The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.*

CA′LAMUS AROMA′TICUS. (From *kalam*, Arab.) Sweet-flag or acorus. See *Acorus Calamus.*

Ca′lamus aroma′ticus Asia′ticus. The *Acorus calamus* of Linnæus.

Ca′lamus odora′tus. See *Acorus calamus.*

Ca′lamus rota′ng. The systematic name of the plant from which we obtain the

Dragon's blood. *Cinnabaris græcorum. Draconthæma. Asagen. Asegen.* Dragon's blood. The red resinous juice which is obtained by wounding the bark of the *Calamus rotang; — caudice densissime aculeato, aculeis erectis, spadice erecto.* It is chiefly obtained from the Molucca islands, Java, and other parts of the East Indies. It is generally much adulterated, and varied in goodness and purity. The best kind is of a dark red colour, which, when powdered, changes to crimson: it readily melts and catches flame, has no smell, but to the taste discovers some degree of warmth and pungency. The antient Greeks were well acquainted with the adstringent power of this drug; in which character it has since been much employed in hemorrhages, and in alvine fluxes. At present, however, it is not used internally, being superseded by more certain and effectual remedies of this numerous class.

CA'LAMUS SCRIPTO'RIUS. A kind of canal at the bottom of the fourth ventricle of the brain, so called from its resemblance to a writing pen.

Ca'lamus vulga'ris. See *Acorus Calamus.*

Calathiana. (From καλαθος, a twig basket; so called from the shape of its flowers.) The herb marsh-gentian, or *Gentiana pneumonanthe* of Linnæus.

Calbia'num. The name of a plaster in Myrepsus.

Calca'dinum. Vitriol.

Calca'dis. An Arabian name for white vitriol and alkali.

CALCA'NEUM. (From *calx*, the heel.) *Calcar pterna. Os calcis.* The largest bone of the tarsus, which forms the heel. It is situated posteriorly under the astragalus, is very regular, and divided into a body and processes. It has a large *tuberosity* or knob, projecting behind to form the heel. A *sinuous cavity*, at its fore part, which, in the fresh subject, is filled with fat, and gives origin to several ligaments. Two *prominences*, at the inner and fore part of the bone, with a pit between them, for the articulation of the under and fore part of the astragalus. A *depression*, in the external surface of the bone near its fore-part, where the tendon of the peronæus longus runs. A large *cavity*, at the inner side of the bone, for lodging the long flexors of the toes, together with the vessels and nerves of the sole. There are two *prominences*, at the under and back part of this bone, that give origin to the aponeurosis, and several muscles of the sole. The anterior surface of the os calcis is concave, for its articulation with the os cuboides, and it is articulated to the astragalus by ligaments.

Calca'nthum. (From χαλκος, brass, and ανθος, a flower; i. e. flowers of brass.) *Calcanthos.* Copperas. Vitriol.

Ca'lcar. (From *calx*, the heel; also from *caleo*, to heat.) The heel-bone; also the furnace of a laboratory.

Calcáreous earth. See *Calx and Lime.*

Calca'ris flos. The larkspur.

Calca'rius la'pis. Limestone.

Ca'lcatar. A name for vitriol.

Ca'lcaton. White arsenic. Troches of arsenic.

Calcatri'ppa. See *Ajuga pyramidalis.*

Calce'na. *Calcenonius. Calcetus.* Paracelsus uses these words to express the tartarous matter in the blood; or that the blood is impregnated with tartarous principles.

Ca'lces, meta'llic. Metals which have undergone the process of calcination, or combustion; or any other equivalent operation.

Ca'lceum equi'num. (From *calceus*, a shoe, and *equus*, a horse; so called from the figure of its leaf.) The herb tussilago, or colt's foot.

Calchi'theos. (From καλχιον, purple.) Verdigrise.

Calchoi'des. (From χαλιξ, a chalkstone, and ειδος, form.) *Calchoidea ossicula.* A name of the cuneiform bones.

Calcidi'cium. The name of a medicine in which arsenic is an ingredient.

Calci'fraga. (From *calx*, a stone, and *frango*, to break; so named from its supposed property of breaking the human calculus.) Breakstone. The herb spleenwort, or scolopendrium, in *Scribonius Largus.*

CALCINA'TION. Oxidation. The fixed residues of such matters as have undergone combustion are called cinders, in common language, and calces, but now more commonly oxides, by chemists; and the operation, when considered with regard to these residues, is termed calcination. In this general way, it has likewise been applied to bodies not really combustible, but only deprived of some of their principles by heat. Thus we hear of the calcination of chalk, to convert it into lime by driving off its carbonic acid and water; of gypsum, or plaster stone, of alum, of borax, and other saline bodies, by which they are deprived of their water of crytallization; of bones which lose their volatile parts by this treatment, and of various other bodies.

Calcina'tum. *Cinificatum.* Terms applicable to calcined substances.

Calcina'tum ma'jus. It is whatsoever is dulcified by the chemical art, which was not so by nature; such as dulcified mercury, lead, and the like substances, which are very speedily consolidated.

Calcina'tum ma'jus Pote'rii. Mercury dissolved in aqua fortis, and precipitated with salt water. Poterius used it in the cure of ulcers.

Calcina'tum mi'nus. Any thing which is sweet by nature, and speedily cures, as sugar, manna, tamarinds, &c.

Calcino'nia. See *Calcena.*

Ca'lcis a'qua. See *Calx.*

Ca'lcis vi'vi flo'res. The pellicle on lime-water.

Ca'lcis os. See *Calcaneum.*

Calcita'ri. Alkaline salt.

Calcite'a. Vitriol.

Calciteo'sa. Litharge.

Ca'lcithos. Verdigrise.

Calcitra'pa. See *Centaurea calcitrapa.*

Calcitra'pa officina'lis. See *Centaurea solstitialis.*

Calcitre'a. Vitriol.

Calcoi'dea ossi'cula. The cuneiform bones.

Ca'lcotar. Vitriol.

Calculi'fragus. (From *calculus,* a stone, and *frango,* to break.) Having the power to break calculi, or stones in the human body.

1. A synonym of lithontriptic. See *Lithontriptics.*

2. A name sometimes applied to scolopendrium, or the pimpernel, from its supposed virtue.

CA'LCULUS. (Diminutive of *calx,* a lime-stone.) *Calculus humanus. Bezoar microcosmicum.* Gravel. Stone. In English we understand by *gravel,* small sand-like concretions, or stones, which pass from the kidneys through the ureters in a few days; and by *stone,* a calculous concretion in the kidneys, or bladder, of too large a size to pass, without great difficulty. Similar concretions are found occasionally in other cavities, or passages. When a disposition to form minute calculi or gravel exists, we often find nephritic paroxysms, as they are called (see *Nephritis,*) which consist of pain in the back, shooting down through the pelvis to the thighs; sometimes a numbness in one leg, and a retraction of either testicle in men, symptoms arising from the irritation of a stone passing through the ureters, as these cross the spermatic cord, on the nerves passing to the lower extremities. These pains, often violent, are terminated by the painful discharge of small stones through the urethra, and the patient is for a time easy. What, however, is meant by the stone is a more serious and violent disease. It is singular that these discharges of small gravel do not usually terminate in stone. Many have experienced them during a long life, without any more serious inconvenience: while the latter is a disease chiefly of the young, and depending on circumstances not easily explained. If the stone attacks persons more advanced in age, it is often the consequence of paroxysms of gout, long protracted, and terminating imperfectly.

When once a stone has acquired a moderate size, it usually occasions the following symptoms: — frequent inclination to make water, excessive pain in voiding it drop by drop, and sometimes a sudden stoppage of it, if discharged in a stream; after making water, great torture in the glans penis, which lasts one, two, or three minutes; and, in most constitutions, the violent straining makes the rectum contract and expel its excrements; or, if it be empty, occasions a tenesmus, which is sometimes accompanied with a prolapsus ani. The urine is often tinctured with blood, from a rupture of the vessels, and sometimes pure blood itself is discharged. Sometimes the urine is very clear, but frequently there are great quantities of slimy sediment deposited at the bottom of it, which is only a preternatural separation of the mucilage of the bladder, but has often been mistaken for pus. The stone is a disease to which both sexes and all ages are liable; and calculi have even been found in the bladders of very young children, nay of infants only six months old.

Women seem less subject to this complaint than men, either owing to constitutional causes, or to the capaciousness, shortness, and straightness of their urethræ, allowing the calculi to be discharged while small, together with the urine.

Chemical analysis of Urinary Calculi.

It is only since the time of Scheele that we have become acquainted with the nature of urinary calculi, this subject having been quite in the dark before that great chemist discovered, in the year 1776, a peculiar acid (the lithic acid) in them, and at the same time found them usually to contain no lime, a circumstance which was soon after confirmed by the experiments of Bergman. From this period, the chemists bestowed a particular attention upon the examination of urinary concretions, as appears from the writings of Dobson, Percival, Falconer, Achard, Hartenkeit, Tychsen, Link, Titius, Walther, Gartner, Brugnatelli, Pearson, and several others, some of whom confirmed the discovery of Scheele, while others contracted, and others enlarged it.

But we are particularly indebted to Fourcroy and Vauquelin, who, since 1786, had turned their attention on this subject, for having made many experiments, by which great light is thrown on the nature of urinary concrements. The following are the interesting results of their chemical inquiries.

The Seat and Physical Properties of Urinary Calculi.

Calculi are found in different parts of the urinary system, in the pelvis of the kidney, in the ureters, in the bladder and urethra; but as they, for the most part, originate in the kidney, the calculi renales make the nucleus of the greatest number of urinary stones. The *calculi renales* differ greatly with respect to their external qualities; for the most part, however, they consist of small, concrete, roundish, smooth, glossy, and crystalline bodies, of a red-yellow colour, like that of wood, and so hard as to admit of polishing. On account of their minuteness, they easily pass through the urinary passages in form of gravel, which being sometimes of a rough surface, cause several complaints on their passage. But in some instances they are of too great a size to be able to pass along the ureters; in which case they increase in the kidneys, sometimes to a great size. Calculi renales of this kind are generally of a brown, dark red, or black colour, and surrounded with several strata of coagulated blood and pus; they have also been observed of a yellow, reddish, and lighter colour; and some consisting of an homogeneous stony mass, but white or grey calculi renales are very rarely to be met with. Amongst the great number that were examined, one or two only were found of a grey or blackish colour, and of a composition similar to those which generally bear the name of mulberry-like stones.

The stones in the ureters, which, on passing into the ureters, are prevented by their size from descending into the bladder, frequently increase very much: they, however, rarely occur; their colour is white, and they consist of phosphate of lime.

The stones in the bladder are the most frequent urinary concrements that have been principally examined; they draw their first origin from the kidneys, whence they descend into the bladder, where they increase; or they immediately originate and increase in the bladder; or they arise from a foreign body that by chance has got into the bladder, which not unfrequently happens, particularly in the female sex. Concretions of this kind differ greatly in their respective physical qualities and external form, which, however, is generally spherical, oval, or compressed on both sides; and sometimes, when there are several stones in the bladder, they have a polyhedrous or cubical form; their extremities are frequently pointed or roundish, but they are very seldom found cylindrical, and more rarely with cylindrical ends.

There is a great variety in the size of the calculi, and likewise in their colour, which is materially different, according to their respective nature and composition. They occur, 1. of a yellowish colour, approaching nearly to red, or brown; such stones consist of lithic acid. 2. Grey, or more or less white; these stones always contain phosphates of earths. 3. Dark grey, or blackish; stones of this colour have oxalates of earths. Many stones shew brown or grey spots, on a yellow or white ground, generally raised on the surface, and consisting of oxalate of lime, which is enclosed in lithic acid, when the ground-colour of the stone is of a wood colour, or in phosphate of lime, when it is white. These spots are, in general, only to be observed in the middle of the stone, or at one of its extremities.

All that is here stated, is the result of observations on more than 600 calculi; and different other colours, that are said to have been observed, either arise from heterogeneous substances, or are merely variations of the above colours. Their surface is smooth and polished in some, in others only smooth, and in others uneven, and covered with rough or smooth corpuscles, which are always of a yellow colour; in some, the surface is partly smooth and partly rough. The white ones are frequently even and smooth, half transparent, and covered with shining crystals, that generally indicate phosphate of ammonia, with magnesia, or they are faint, and consist of minute grains; or rough, in which case they consist of phosphate of lime. The brown and dark grey stones are, from their similarity to mulberries, called mulberry-stones, and being frequently very rugged, they cause the most pain of all.

On examining the specific weight of urinary calculi in more than 500 specimens, it was found to be, in the lightest, as 1213.1000, in the heaviest, as 1976.1000. Their smell is partly strong, like urine or ammonia, partly insipid, and terreous; especially the white ones, which are like sawed ivory, or rasped bone.

The internal texture of calculi is but seldom guessed from their external appearance, particularly when they exceed the size of a pigeon's egg. On breaking them, they generally separate into two or there strata, more or less thick and even, which prove that they are formed by different precipitations, at different times. In the middle, a nucleus is generally seen, of the same mass as the rest. When the place they are broken at is finely streaked, and of a yellow or reddish colour, the lithic acid predominates; but when they are half transparent, luminous like spar, they have ammoniacal phosphate of magnesia in them, and phosphate of lime, and then they are brittle and friable; but when they are so hard as to resist the instrument, of a smooth surface, and a smell like ivory, they contain oxalate of lime. It frequently happens, that the exterior stratum consists of white phosphate of earth, while the nucleus is yellow lithic acid, or oxalate of lime, covered sometimes with a yellow stratum of lithic acid, in which case the nucleus appears radiant; but when it consists of lithic acid, and is covered with white phosphate of earth, it is roundish, oval, and somewhat crooked. These concretions have very seldom three strata; namely, on the outside a phosphate, towards the inside lithic acid, and quite withinside an oxalate of lime; but still rarer these substances occur in more strata, or in another order, as beforementioned.

Stones of the urethra are seldom generated in the urethra itself; however, there are instances of their having been formed in the fossa navicularis, by means of foreign bodies that have got into the urethra. We also very frequently observe stony concrements deposited between the glans and prepuce. All the concretions produced in the inside and outside the urethra consist of phosphate of earths, which are easily precipitated from the urine. There are likewise stones in the urethra which have come out of the bladder, having been produced there, or in the kidneys; and they generally possess the properties of stones of the kidneys.

The different constituent Particles of Urinary Calculi.

It has been mentioned before, that Scheele found a peculiar acid in the urinary concretions, and likewise that phosphate of lime was discovered in them. The identity of the lithic acid, however, was much doubted by modern chemists, particularly by Dr. Pearson, who asserted that it was merely an oxide, whereby he gave rise to the discoveries which Fourcroy and Vauquelin have since made on this subject, because they were induced to repeat the experiments, in order to examine whether the lithic acid were really an acid. Their endeavours were fully rewarded, as they not only found the lithic acid and phosphate of lime in the different calculi, but also five other substances, viz. the lithate of ammonia, oxalate of lime, siliceous earth, phosphate of ammoniacal magnesia, and an animal matter.

1. *Of the Lithic or Uric Acid.*

The acid discovered by Mr. Scheele, in the urinary concretions, was styled lithic acid, or, according to Dr. Pearson's Researches, uric acid; which, after Scheele, has the following properties. It is insipid, without smell, hard, crystallizable, not soluble in cold water, and in boiling water only in several thousand times its quantity. The solution, after having become cool, deposits the acid in form of minute yellow needles, easily soluble in the lye of fixed alkalies, out of which, however, it is precipitated by all acids (even the carbonic acid), except the sulphuric and muriatic, which have no effect on it. Concentrated nitric acid, on dissolving it, obtains a red colour. On distilling the lithic acid, it yields a small quantity of sublimed, undecomposed acid, very little oil and water, crystallized carbonate of ammonia, carbonic acid, and a very black coal, which, however, contains neither alkali nor lime. Besides these properties, it possesses still others. On rubbing it with concentrated lye of potash or soda, it immediately forms a saponaceous, thick, and pulpy mass, which is very soluble in water, when saturated with alkali, but little soluble when only neutralized with it. The neutral combinations have little taste, are not crystallizable, and, when diluted with water, the muriatic acid precipitates the uric acid in form of small, needle-like, shining, somewhat yellowish crystals. Ammonia receives very little of it, which combination is almost indissoluble. Lime-water has likewise very little effect on it, and the carbonates of alkalies none at all. On being dissolved in nitric acid, a part of the lithic acid is changed into oxalic acid. The red colour which appears after this combination, is said by Pearson to prove that substance to be merely an oxide; but it arises from a peculiar animal matter. When oxygenated muriatic acid is brought in contact with lithic acid, the colour of it grows pale, it puffs up, becomes soft and gelatinous, and at last obtains the consistency of a milky liquor; from which process, only one-sixtieth of a white, light, animal substance remains, and a quantity of carbonic acid evolves itself under continual slow effervescence. The liquor yields muriate of ammonia, oxalate of ammonia, both in crystals, free muriatic and malic acid; consequently the oxygenated muriatic acid separates the uric acid into ammonia, carbonic acid, oxalic acid, and malic acid, whereby we observe that the oxygenated muriatic acid changes the uric acid, first into ammonia and malic acid, but on the addition of more acid, into oxalic acid: and when still more acid is added, into water and carbonic acid. The remaining white substance is the same, from which the red colour originates that appears on the combination of the uric acid with nitric acid, and which imparts the cubical form to the muriate of ammonia, obtained by the evaporation of the liquor. It remains now to be stated what is observed in the distillation of that acid, by which it yields, not only carbonate of ammonia, but also carbonic gas, very little oil, Prussic acid, partly in form of gas, partly fluid, a considerable quantity of coal that contains no salt, and a little water. The productions thus obtained have the smell of bitter almonds. The results of these inquiries manifestly shew, that the lithic acid is really a distinct acid from all others, consisting of azote, carbon, hydrogen, and oxygen. This peculiar acid is an excrementitious substance, which is carried off by the urine, and, at the forming of calculi, combines itself with a coloured animal matter, from which also it probably originates by a process still unknown.

2. *Of the Lithate of Ammonia.*

This substance seems to have been unknown before, or at least not properly discerned from the uric acid; and, though Scheele has observed it, he was ignorant of its particular nature. It is easily to be distinguished, by the small even strata in which it is formed, by its colour, that looks like milk coloured with coffee, and by its forming but small calculi. It dissolves in the lees of fixed alkalies like the lithic acid, but with the characteristic difference that it discharges ammonia, a phenomenon already observed by Scheele. It is more soluble in cold as well as warm water, than the lithic acid. It is in the same way affected by acids, except that a greater quantity is required for changing it. It is generally mixed with phosphate of ammoniacal magnesia, because it seems only to be produced after a sufficient quantity of ammoniacal magnesia has been formed, to saturate the phosphoric acid.

3. *Of the Phosphate of Lime.*

The existence of this substance had hitherto been but inaccurately determined, every substance which was not lithic acid being formerly comprised by the name of phosphate of lime. It occurs in small friable strata, which break in scales, or splints, of a grey white colour, and are faint, opaque, without any smell or taste, and crystallized in a luminous or spar-like form; instead of strata, it is frequently composed of friable grains, that slightly cohere, and has many holes and pores, like a spongy texture. It never forms a calculus by itself, being in a calculus always united with an animal gelatinous matter; on account of which circumstance it becomes black by exposing it to strong heat; and burns to coal, exhaling the odour of burned bones; and yields water, oil, carbonate of ammonia, and a carbonaceous residuum. Being calcined white, it only leaves lime, and phosphate of lime, without any water of crystallization. It is not soluble in cold water, but in boiling water a part of its gelatine dissolves, spreading an animal odour. All acids, except the boracic and carbonic acid, dissolve it, leaving on the bottom of the vessels transparent spots of animal matter. These solutions are all precipitated by alkalies, but without any decomposition, the precipitate remaining phosphate of lime. On treating the phosphate of lime with concentrated sulphuric acid, a thick pulpy mass of acid-sulphate and phosphate of lime will be obtained, on which pure alkalies, as well as carbonates of alkalies, have no effect. We never could find acid-phosphate of lime, as Brugnatelli pretends to have observed.

4. *Of the Phosphate of Ammoniacal Magnesia.*

It consists of scaly, half-transparent, hard, and coherent strata; can be sawed without crumbling, and reduced to a fine, soft, and white powder. It is of a sweetish insipid taste, somewhat soluble, and crystallized in rhomboids, or thick laminas, dispersed in the cavities of other calculous substances; and it is frequently found on the surface of other calculi. It contains, betwixt its strata, a gelatinous substance, but less than the phosphate of lime, on which account it also blackens by being heated. Though it be but little soluble in water, yet it dissolves in such a quantity as to be capable of crystallizing by slow evaporation. Acids dissolve it more quickly than they do the phosphate of lime. Weak sulphuric acid entirely dissolves it, forming sulphate of ammoniacal magnesia. In diluted muriatic or nitric acid, it disappears more quickly than phosphate of lime. Ammonia, by which that salt is made turbid, only precipitates small particles of magnesia. The lees of fixed alkalies disengage from it ammonia, without forming with it a solution; and, depriving it of the phosphoric acid, leave the magnesia behind.

5. *Of the Oxalate of Lime.*

It is, according to our observations, only found in the mulberry-like calculi, in combination with a coloured animal matter, and consisting of strata covered with pointed, roundish, rough or smooth protuberances; outside it appears of a dark or brown colour, but internally it is grey, frequently with white streaks, of a solid texture, and may be polished like ivory; it breaks in scales, or in the shape of shells; and, on being pounded, or sawed, it exhales an animal odour, like semen. It is the heaviest of all calculous substances, and the only one which yields one-third of lime by calcination. It dissolves with difficulty in acids, and is precipitated unaltered by alkalies from nitric acid. The fixed alkalies decompose it when they are impregnated with carbonic acid, and when it is pulverized, and the solution heated, whereby carbonate of lime and oxalates of alkalies are obtained.

The great quantity of animal matter which constantly adheres to this oxalate of lime is very characteristic, it imparts the brown, reddish, blackish colour to the above kind of stones, and likewise the fine and solid texture. This substance may be obtained by putting small pieces of these stones into diluted nitric acid, whereby it appears of the same colour, and becomes soft and spongy. The great hardness of this kind of calculous substance, most probably arises from the intimate connection of its particles, produced by the combination of the oxalate of lime with animal matter, in the same way as lime obtains a great degree of solidity by its combination with albuminous matter, of which, and of a peculiar matter of urine, that animal substance seems to consist.

6. *Of the Siliceous Earth.*

Amongst 600 calculi that were examined, there were only two which contained this earth; both had the texture of mulberry-like stones, though of a lighter colour, and by being calcined, lost one-third of their weight, without giving free-lime; heated with acids they lost nothing, but when melted with four times as much of alkali, they yielded siliceous earth by being treated with muriatic acid. They contained phosphate of lime, and an animal matter similar to that which is united with the oxalate of lime. They were hard, difficult to be sawed and pulverized, and the powder made scratches in metal. On being burnt, they emitted an animal odour; they imparted nothing to boiling water, and to the acids a little phosphate of lime, which difficultly separates from the siliceous earth. Alkalies, either pure or combined with carbonic acid, did not affect them, merely depriving them of a part of their animal matter. Their essential character consists in their being fusible and vitrifiable with fixed alkalies.

7. *Of the Animal Matter.*

All the six substances just examined, which constitute the urinary calculi of the human species, are always combined with an animal matter, as appears from its being burnt to coal, from the productions it yields by distillation, from its stench on being burnt, and from the cellulous membranous flocculi, which remain when pieces of calculi are dissolved in diluted acids. This animal matter has been frequently, and with good reason, considered as the basis of all urinary concretions, like as in bones the gelatinous matter, the first basis of the bones, forms an organic texture, in the interstices of which the phosphate of lime is deposited. It is very remarkable, that the different constituent particles of urinary calculi are combined with a dissimilar animal matter, which is sometimes albuminous, sometimes gelatinous, sometimes composed of both, and frequently united with the matter of urine. Thus the lithic acid, or the lithate of ammonia, contains a third of albuminous matter, combined with the matter of urine; the phosphates of earths, albuminous matter, gelatine in form of membranes, and laminas, or tela cellulosa; the oxalate of lime, a spongy, yet more solid texture, of the colour of albumen; and the siliceous earth, a similar substance. On the whole, the animal matter seems to unite and join together all the acid and saline particles of urinary concretions.

The Classification of Urinary Stones.

The old classification of urinary calculi, made according to their figure and their size, cannot at present, where we have acquired so accurate a knowledge of their internal nature, be retained, as they ought rather to be classed according to their constituent particles; however no regard is to be had to the animal matter, as being found in all urinary concretions, and having no influence on their respective difference. On comparing the results of the analyses of more than 600 stones, Fourcroy was induced to bring them under three genera; *the first* of which comprehends such stones as are merely composed of one substance, besides the animal matter; *the second*, contains urinary concretions, consisting of two substances, besides the animal matter; and *the third*, comprises all those which are formed by more than three calculous substances. These three genera comprehend about twelve species, namely, the first genus three, the second seven, and the third two; but it must be remembered that the number of the genera, as well as of the species, is determined after the observations hitherto made, and may consequently be increased in future.

1. *The first species* of urinary concretions consists of lithic acid, and stones of this kind most frequently occur, as there were, amongst 600, about 150. They are easily distinguished by their reddish or high yellow colour, much resembling that of wood, by their brittle, radiant-like, homogeneous, and fine texture, and by their perfect solubility in the lyes of fixed alkalies, without disengaging the smell of ammonia. Their size vaires from the bigness of a pea to that of a duck's egg, &c. and their figure is roundish, spheroid, compressed, oval, oblong, &c. the surface polished like marble, but frequently rough and warty; of a crimson light red, yellowish, or light brown colour, but never white, grey, or black; their strata differ in number and thickness, and are frequently of a smooth surface. The specific weight of these stones is from 1.276 to 1.786, but generally more than 1.500. The urinary concretions in the kidneys are mostly of this species.

2. *The second species* is composed of lithate of ammonia, and differs from the former by disengaging ammonia on their being dissolved in the lyes of fixed alkalies. Concretions of this kind are generally small, of a pale or grey colour, and consist of fine strata, easily separable from each other; they mostly contain a nucleus, which is easily separated from the strata that cover it. Their figure is generally oblong, compressed like almonds, and of a smooth surface, which is frequently crystalline. Their specific weight varies from 1.225 to 1.720. They are entirely soluble in water, particularly when previously pulverised. All acids, principally the muriatic acid, deprive them of the ammonia, leaving the pure lithic acid behind. They are frequently found covered with a thin stratum of lithic acid. Amongst 600 calculi there were but few of this kind.

3. *The third species*, consisting of oxalate of lime, are easily to be distinguished by the protuberances and inequality of their surface, whence they have got the appellation of mulberry-like stones; by their hardness, grey colour, solid texture, their polish like ivory, in the inside, and their

particular smell on being sawed, which resembles that of semen. A peculiar characteristic, which distinguishes them from all others, consists in their leaving lime after the calcination, in their being with difficulty soluble in acids and not soluble in alkalies, and, at last, in their being only decomposed by the lees of carbonates of alkali. They weigh from 1.428 to 1.976, and their size varies from that of a calculus renalis to the bigness of an egg, or more; their figure is generally spherical or spheroid. They often make the nucleus of other stones, in which case they belong to another species. In 300 stones they bore the proportion of one-fourth or one-fifth.

4. *Stones of this species* contain lithic acid and phosphate of earth, but in a separate state. Their surface is white, cretaceous, brittle, and half-transparent, as it either consists of phosphate of lime, or of phosphate of ammoniacal magnesia, the kernel being formed by lithic acid; thus both constituents are exactly separate from each other. They were found in the proportion of one-twelfth amongst the stones that were examined, and they grow bigger than any of the rest, as they appear from the size of an egg to that of the whole bladder, even when extended. They generally have an oval form, often pointed at one end, of a smooth surface, which, however, is frequently covered with crystals of phosphate of ammoniacal magnesia. Sometimes the lithic acid in the middle is alternately covered with phosphate of lime, and phosphate of ammoniacal magnesia. The specific weight of these stones is extremely variable.

5. *The fifth species of calculi* contains, likewise, lithic acid and phosphates of earth, but intimately mixed with each other. Of these stones, a great many varieties are observed, depending on the proportionable quantity of their constituent particles, as well as on the strata in which they lie above one another. The chief constituents, the phosphates of earths, are separated in different strata, but sometimes so intimately mixed with each other, that it is impossible to distinguish them with the eye; and the analysis could only shew their difference. From this circumstance arise the variety in the colour, figure, and number of the strata. The colour, however, is generally grey, but frequently variegated like marble, sometimes like soap. Their figure is irregular, oval, or globular, and the surface mostly brittle, cretaceous, or whitish, so as to make us believe that they only consist of phosphate of lime. The polyhedrous stones generally belong to this species, when they have the appearance of being worn away by rubbing. They make about one-fifth of the stones that were examined. Their specific weight varies extremely, the least being 1.213, the greatest 1.739.

6. *This species* is constituted by lithate of ammonia and phosphate of earth, *i. e.* of lime and ammoniacal magnesia; and resembles in its external appearances the fourth species. One of the constituents, generally the lithate of ammonia, makes the nucleus, while a mixture of the two others, but rarely one by itself forms the crust. Sometimes, however, the nucleus contains also the phosphates, and the crust a little lithate of ammonia, which, even in some varieties, is mixed with pure lithic acid. The strata in stones of this kind are more easily separable, and always smaller than those of the fourth species. The specific weight is 1.312 to 1.761; and they are more rarely met with than most of the rest. Amongst 600 there were only twenty of this kind.

7. Stones of the *seventh species* consist likewise of lithate of ammonia and phosphate of earths, but intimately mixed with each other. They are of a paler colour, much lighter than the first species, and disengage a great deal of ammonia on their being treated with potash. We found them only in the proportion of one-fortieth amongst the stones which we have analysed. They never grow so large as the two former.

8. The constituent particles of the *eighth species* are phosphate of lime and phosphate of ammoniacal magnesia. The pure white colour, the friability, their being insoluble in alkalies, and their easy solubility even in weak acids, constitute the chief characteristics of this sort of stones, of which about 60 were found amongst 600: sometimes they are of an enormous size, of irregular form, rarely round, but frequently of an uneven surface, and resembling an incrustation. Their texture is formed of white brittle strata; sometimes interwoven with solid half-transparent crystals of phosphate of ammoniacal magnesia. The crusts formed on foreign bodies that happened to penetrate into the bladder, belong to this species; the specific weight of which is 1.138 to 1.473.

9. This species of calculi contains oxalate of lime, but externally uric acid, in more or less quantity, and are only to be distinguished by the nucleus from the first species. The proportion of both constituents, and the specific weight, vary extremely, the latter being 1.341 to 1.754. Sometimes the nucleus, consisting of oxalate of lime, is only covered on one side with uric acid, and discernible on the other by protuberances with which the surface is variegated; which variety, however, seldom occurs.

10. Stones of this species have, in their centre, oxalate of lime, surrounded by phosphates of earths; the kernel is grey, or brown, and radiant-like, the crust white and cretaceous; their size and figure differ extremely, and their specific weight is from

1.168 to 1.752. They amount to one-fifth of the 600 stones that were examined.

11. This species contains stones composed of three or four calculous substances, namely, of oxalate of lime, phosphates of earths, and uric acid, either pure or combined with ammonia. They rarely occur; and amongst 600 stones only ten or twelve were observed. They often consist of three distinct strata, viz. in the interior, of oxalate of lime; in the middle, of lithate of ammonia; and the exterior of phosphates of earths, which are frequently mixed with uric acid or lithate of ammonia, all which are distinguished on their being sawed through. This species comprehends three varieties; the first of which consists of oxalate of lime, uric acid, and phosphates of earths; the second contains lithate of ammonia, combined with pure uric acid, and the two other constituents; the third has, besides these substances, free uric acid and lithate of ammonia, mixed with the phosphates of earths. We forbear to mention other varieties of this species, as being less remarkable and instructive.

12. The last species of calculi is of a very complicated composition. The siliceous earth seems to have taken the place of the oxalate of lime; it is mixed with uric acid and lithate of ammonia, and covered by phosphates of earths. Stones of this kind are the rarest of all, and there were only *two* amongst 600.

The causes of the Generation of Urinary Calculi.

To inquire into the causes by which urinary concretions are produced, is both interesting and useful, however attended with the greatest difficulties. The writings of medical authors are full of conjectures and hypotheses with regard to this subject, on which nothing could be ascertained before we had acquired an accurate knowledge of the nature of urinary concretions. It is owing to this circumstance that the most enlightened physicians acquiesced in ascribing the immediate cause of them to a superabundance of terreous matter in the urine; and Boerhaave, as well as, particularly, Van Swieten, imagined that the urine of all men contained calculous matter in the natural state, and that, for the generation of stones, a nucleus was only required, to attract it. That this may be the case, in some instances, is proved by frequent experience; but stones produced by foreign bodies, that have accidentally got into the urethra or bladder, are always white and composed of phosphates of earths, and seldom or never covered with lithic acid, a substance which is observed to form the stones that most frequently occur; but even in these the nucleus consists of a substance formed in the body itself, as a particle descended from the kidneys, &c. which must, therefore, have necessarily originated in a peculiar internal cause. A superabundance of uric acid in stony patients, and its more copious generation than in a sound state, though it seems to be one of the principal and most certain causes, is by no means satisfactory, as it only explains the precipitation of stony matter from the urine, but not why it unites in strata. A coagulating substance is required for separating, attracting, and, as it were, agglutinating the condensible particles that are precipitated. This substance is undoubtedly the animal matter which we have constantly found in all calculous masses, and which seems to constitute the basis of stones, like the membranous gelatina that of bones. It is known that the urine of calculous patients is generally muddy, ductile, in threads, slimy, and as if mixed with albumen, which quality it obtains at the moment when the ammonia is disengaged, or on the addition of potash that separates it from the acid in which it was dissolved; and in all cases of superabundance of lithic acid the urine contains a great quantity of that animal matter, which promotes the precipitation of it, and attracts, and unites the particles thus separated. Hence it appears, that every thing capable of increasing the quantity of that pituitous gluten in the urine, may be considered as the remote cause of the formation of calculi. And the old ideas on pituitous temperaments, or superabundant pituita, &c. which were thought to dispose people to a calculus, seem to be connected with the late discoveries on the nature of urinary stones. Though the animal matter appears to be different in different calculi, yet it is certain, that every calculous substance contains an animal gluten, from which its concrete and solid state arises; whence we may fairly state the superabundance of that substance as the chief and principal cause of the formation of calculi.

There are, however, other causes which seem to have a particular influence on the nature of urinary stones, and the strata in which they are formed; but it is extremely difficult to penetrate and to explain them. We are, for instance, entirely ignorant of the manner in which urinary stones are formed from the oxalate of lime; though, from their occurring more frequently in children than in adults, we might be entitled to ascribe them to a disposition to acor, a cause considered by Boerhaave as the general source of a great number of diseases incident to the infantile age. This opinion seems to be proved by the ideas of Bonhomme, physician at Avignon, on the oxalic or saccharic acid, as the cause of mollities ossium in the rickets; by this acid being discovered in a species of saliva by Brugnatelli; and, lastly, by an observation of Turgais, who found this acid in the urine of a child diseased with worms. We but rarely observe saccharic acid in the human body, which appears to be mostly adventitious, and by which the animal matter is rendered coagulable, and deposited, or precipitated, with the oxalate of lime; or the oxalic acid decomposes the phosphate of lime, and forms an insoluble combination, incapable of being any longer kept dissolved in the urine. It is, however, extremely difficult to determine how far the constitution of the body is connected with that particular disposition in the urine, of precipitating sometimes phosphate of lime mixed with oxalate of lime, sometimes phosphate of ammoniacal magnesia, either by itself or mixed with lithic acid, &c. &c. Who can explain the reason why, of 600 stones, there were only two in which siliceous earth could be traced? Still more difficult is it to explain the causes why the above substances precipitate either at once or in different strata; but it may suffice to have shewn how many observations and experiments are required, and what accurate attention and perseverance are necessary, in order to throw light on so difficult a subject.

The means to be employed in calculous complaints must vary according to circumstances. Permanent relief can be obtained only by the removal of the morbid concretion; and where this is of too large a size to be passed by the natural outlet, the operation of lithotomy becomes necessary. Various remedies indeed have been proposed as capable of dissolving urinary calculi; and some of them are certainly useful in palliating the symptoms, and perhaps preventing the formation of fresh calculous matter: but experience has not sanctioned their efficacy as actual lithontriptics; and by delaying the operation, we not only incur the risk of organic disease being produced, but the concretion may also become friable externally, so as to be with more difficulty removed. Sometimes however the advanced age of the patient, the complication with organic disease, or the exhausted state of the system, may render an operation inexpedient; or he may not be willing to submit to it; we shall then find some advantage from the use of chemical remedies, according to the morbid quality of the urine; that is generally from alkaline or earthy preparations, where a red deposit appears, and from acids where there is a white sediment. Tonic medicines may also be useful, and some of the mild astringents, especially uva ursi, and occasional narcotics, where violent pain attends: sometimes an inflammatory tendency may require fomentations, the local abstraction of blood, and other antiphlogistic measures. The most likely plan of effecting a solution of the calculus must certainly be that proposed by Fourcroy, namely, injecting suitable liquids into the bladder. The most common calculi, containing uric acid, are readily soluble in a solution of potash, or soda, weak enough to be held in the mouth, or even swallowed without inconvenience; those which consist of phosphoric acid neutralized by lime, or other base, the next in frequency, dissolve in nitric or muriatic acid of no greater strength; the most rare variety, made up mostly of oxalate of lime, may be dissolved, but very slowly, in nitric acid, or solutions of the fixed alkaline carbonates, weak enough not to irritate the bladder. However it is not easy to ascertain which of these solvents is proper in a particular case, for most calculi are not uniform throughout, owing probably to the urine having varied during their formation, so that the examination of this secretion will not certainly indicate the injection required. The plan recommended therefore is, the bladder having been evacuated, and washed out with tepid water, to inject first the alkaline solution heated to the temperature of the body, and direct it to be retained for half an hour, or longer, if the person can bear it; then to the liquor voided and filtered add a little muriatic acid, which will cause a white precipitate, if there be any uric acid dissolved; and so long as this happens, the same injection should be used, otherwise diluted muriatic acid is to be thrown in, and ammonia added to it when discharged; whereby phosphate of lime, if there be any, is precipitated: and when neither of these succeeds, diluted nitric acid is to be tried; in each case varying the injection from time to time, as that previously used loses its efficacy. However there appears one source of error in this method, namely, that the urine secreted, while the liquid is retained, may give rise to a precipitate, though none of the calculus may have been dissolved; it would therefore be proper to examine the urine previously, as well as occasionally during the use of injections, and, if necessary, correct its quality by the exhibition of proper internal medicines. See *Lithontriptics* and *Lithotomy*.

Ca'lculus bilia'ris. See *Gall-stones.*

Calda'rium. (From *caleo*, to make hot.) A vessel in the baths of the antients, to hold hot water.

Calefa'cients. (*Calefacientia*, sc. *medicamenta;* from *calidus*, warm, and *facio*, to make.) Medicines, or other substances, which excite a degree of warmth in the parts to which they are applied: as *piper, spiritus vini*, &c. They belong to the class of stimulants.

CALE'NDULA. (*Quod singulis calendis*, i. e. *mensibus, florescat;* so called because it flowers every month.) Marigold.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia necessaria.*

2. The pharmacopœial name of the Single marigold. Garden marigold. *Calendula sativa. Chrysanthemum. Sponsa solis. Caltha vulgaris.* The flowers and leaves of this plant, *Calendula officinalis; seminibus*

cymbiformibus, muricatis, incurvatis omnibus, of Linnæus, have been exhibited medicinally: the former, as aperients in uterine obstructions and icteric disorders, and as diaphoretics in exanthematous fevers; the latter, as gentle aperients, and to promote the secretions in general.

Calen′dula alpi′na. The *Arnica montana* of Linnæus. See *Arnica.*

Cale′ndula arve′nsis. The wild marigold. See *Caltha.*

Cale′ndula officina′lis. The systematic name of the single marigold plant. See *Calendula.*

Cale′ndula palu′stris. Common single marsh-marigold. See *Caltha palustris.*

Ca′lenture. A febrile delirium, said to be peculiar to sailors, wherein they imagine the sea to be green fields, and will throw themselves into it if not restrained. Bonetus gives an account of it; also Dr. Oliver and Dr. Stubbs. It is probably a species of phrenitis.

Cale′sium. (Indian.) A tree which grows in Malabar, whose bark, made into an ointment with butter, cures convulsions from wounds, and heals ulcers. The juice of the bark cures the aphthæ, and, taken inwardly, the dysentery. *Ray.*

Ca′li. (Arab.) The same as kali.

Calicha′pa. The spina alba, or white-thorn.

Ca′lidum. In medical language, it is commonly used with the adjective *animale,* or *innatum,* for animal heat, or the vis vitæ.

Calie′ta. (From *καλιης*, a nest, which it somewhat resembles.) *Calliette.* A fungus growing on the juniper-tree.

CALI′GO. (*Caligo,-ginis,* fœm.) A disease of the eye, known by diminished or destroyed sight; and by the interposition of a dark body between the object and the retina. It is arranged by Cullen in the class *locales,* and order *dysæsthesiæ.* The species of caligo are distinguished according to the situation of the interposed body: thus *caligo lentis, caligo corneæ, caligo pupillæ, caligo humorum,* and *caligo palpebrarum.*

Cali′go le′ntis. *Glaucoma Woulhousi.* The true cataract. See *Cataract.*

Cali′go co′rneæ. An opacity of the cornea. See *Caligo.*

Cali′go pupi′llæ. *Synchysis. Amyosis.* Blindness from obstruction in the pupil. See *Caligo.*

Cali′go humo′rum. *Glaucoma Vogelii.* Blindness from a fault in the humours of the eye. See *Caligo.*

Cali′go palpebra′rum. Blindness from a disorder in the eyelids. See *Caligo.*

Caliha′cha. The cassia-lignea, or cassia-tree of Malabar.

Cali′mia. The lapis calaminaris.

CA′LIX. (*Calix, -icis,* m.; from *καλυπτω*, to cover.) *Calyx.*

1. The term calix is given to the membrane which covers the papillæ in the pelvis of the human kidney.

2. The name of the case, or sheath, in which the flower of plants is concealed before it expands.

Callæ′um. (From *καλλυνω*, to adorn.) *Callæon.* The gills of a cock, which, Galen says, is food not to be praised or condemned.

Calle′na. A kind of salt-petre.

Ca′lli. Nodes in the gout. *Galen.*

Ca′llia. (From *καλος*, beautiful.) A name of the chamomile.

Callible′phara. (From *καλος*, good, and *βλεφαρον*, the eyelid.) Medicines, or compositions, appropriated to the eye-lids.

CALLICO′CCA. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Callico′cca ipecacua′nha. The plant from which ipecacuan root is obtained was long unknown; it was said by some writers to be the *Psychotria emetica;* class, *Pentandria;* order, *Monogynia:* by others, the *Viola ipecacuanha,* a syngenesious plant of the order Monogynia. It is now ascertained to be neither, but a small plant called *Callicocca ipecacuanha.* There are three sorts of ipecacuan to be met with in our shops, viz. the ash-coloured or grey, the brown, and the white.

The ash-coloured is brought from Peru, and is a small wrinkled root, bent and contorted into a great variety of figures, brought over in short pieces, full of wrinkles, and deep circular fissures, down to a small white woody fibre that runs in the middle of each piece: the cortical part is compact, brittle, looks smooth and resinous upon breaking: it has very little smell; the taste is bitterish and subacrid, covering the tongue, as it were, with a kind of mucilage.

The brown is small, somewhat more wrinkled than the foregoing; of a brown or blackish colour without, and white within: this is brought from Brazil.

The white sort is woody, and has no wrinkles, nor any perceptible bitterness in taste. The first, the ash-coloured or grey ipecacuan, is that usually preferred for medicinal use. The brown has been sometimes observed, even in a small dose, to produce violent effects. The white, though taken in a large one, has scarcely any effect at all. Experience has proved that this medicine is the safest emetic with which we are acquainted, having this peculiar advantage, that, if it does not operate by vomit, it readily passes off by the other emunctories. Ipecacuan was first introduced as an infallible remedy against dysenteries, and other inveterate fluxes, as diarrhœa, menorrhagia, leucorrhœa, &c. and also in disorders proceeding from obstructions of long standing; nor has it lost much of its reputation by time: its utility in these cases is thought to depend upon its restoring perspiration. It has also been successfully employed in spasmodic asthma, catarrhal and consumptive cases. Nevertheless, its chief use is as a vomit, and in small doses, joined with opium, as a diaphoretic. The officinal preparations are the *pulvis ipecacuanhæ compositus*, and the *vinum ipecacuanhæ*.

Calli'creas. (From *καλος*, good, and *κρεας*, meat; so named from its delicacy as food.) The pancreas, or sweet-bread.

Calli'gonum. (From *καλος*, beautiful, and *γονυ*, a knot, or joint; so named from its being handsomely jointed, like a cane.) The polygonum, or knot-grass.

Callioma'rchus. The Gaulish name, in Marcellus Empiricus, for tussilago, or colt's-foot.

Ca'llion. A kind of night-shade.

Calliphy'llum. (From *καλλος*, beauty, and *φυλλον*, a leaf.) The herb adiantum, or maidenhair. See *Adianthum*.

Callistru'thia. (From *καλος*, good, and *ϛρυθος*, a sparrow; because it was said to fatten sparrows.) A fig mentioned by Pliny, of a good taste.

Callitri'cum. (From *καλλος*, beauty, and *ϑριξ*, hair; so named because it has the appearance of long, beautiful hair; or, according to Littleton, because it nourishes the hair, and makes it beautiful.) The herb maidenhair.

Callo'ne. (From *καλος*, fair.) Hippocrates uses this word, to signify that decency and gravity of character and deportment which it is necessary that all medical men should be possessed of.

CALLO'SITAS. Callosity, or preternatural hardness.

CA'LLOUS. A surgical term, signifying hardened or indurated; thus the callous edges of ulcers.

CA'LLUS. (*Callus, i*, m. and *Callum, i*, n.

1. The bony matter deposited between the divided ends of broken bones, about the fourteenth day after the fracture.

2. A preternatural hardness, or induration, of any fleshy parts.

Caloca'tanus. (From *καλος*, beautiful, and *κατανον*, a cup; so called from the beauty of its flower and shape.) The papaver rhœas, or wild poppy.

Calome'lanos turque'ti. So Riverius calls a purgative medicine, composed of calomel and scammony.

Calo'melas. (From *καλος*, good, and *μελας*, black; from its virtues and colour. The preparation called Æthiops mineral, or *hydrargyrus cum sulphure*, was formerly and properly so named. But calomel now means a white preparation of sublimed mercury.) See *Submurias hydrargyri*.

CALO'RIC. (*Caloricum*; from *calor*, heat.) Heat. Igneous fluid.

Heat and cold are perceptions of which we acquire the ideas from the senses; they indicate only a certain state in which we find ourselves, independent of any exterior object. But as these sensations are for the most part produced by bodies around us, we consider them as causes, and judging by appearances, we apply the terms *hot*, or *cold*, to the substances themselves; calling those bodies *hot*, which produce in us the sensation of heat, and those *cold*, which communicate the contrary sensation.

This ambiguity, though of little consequence in the common affairs of human life, has led unavoidably to confusion and perplexity in philosophical discussions. It was to prevent this, that the framers of the new nomenclature adopted the word *caloric*, which denotes that which produces the sensation of heat.

Theories of Heat.

Two opinions have long divided the philosophical world concerning the nature of heat.

1. The one is: that the cause which produces the sensation of heat, is a real, or distinct substance, universally pervading nature, penetrating the particles or pores of all bodies, with more or less facility, and in different quantities.

This substance, if applied to our system in a greater proportion than it already contains, warms it, as we call it, or produces the sensation of heat; and hence it has been called *caloric* or *calorific*.

2. The other theory concerning heat is; that the cause which produces that sensation is *not* a separate or self-existing substance; but that it is merely like gravity, a property of matter; and that it consists in a specific or *peculiar motion, or vibration* of the particles of bodies.

The arguments in favour of the first theory have been principally deduced from the evolution and absorption of heat during chemical combinations; those of the latter are chiefly founded on the production of heat by friction. For it has been observed, that whatever is capable of producing motion in the particles of any mass of matter, excites heat. Count Rumford and Professor Davy have paid uncommon attention to this fact, and proved, that heat continues to be evolved from a body subjected to friction, so long as it is applied, and the texture or form of the body not altered.

All the effects of heat, according to this theory, depend therefore entirely on the vibratory motion of the particles of bodies. According as this is more or less intense, a higher or lower temperature is produced; and as it predominates over, is nearly equal, or inferior to the attraction of cohesion, bodies exist in the gaseous, fluid, or solid state.

Different bodies are susceptible of it in different degrees, and receive and communicate it with different celerity. From the generation, communication, and abstraction of this repulsive motion, under these laws, all the phenomena ascribed to heat are explicable.

Each of these theories has been supported by the most able philosophers, and given occasion to the most important disputes in which chemists have been engaged; which has contributed in a very particular manner to the advancement of the science. The obscurity of the subject, however, is such, that both parties have been able to advance most plausible arguments.

Setting aside all enquiries concerning the merits of these different doctrines, we shall confine ourselves to the general effects, which heat produces on different bodies. For the phenomena which heat presents, and their relation to each other, may be investigated with sufficient precision, though the materiality, or immateriality of it, may remain unknown to us.

Nature of Heat.

Those who consider heat as matter, assert that caloric exists in two states, namely, in combination, or at liberty.

In the first state it is not sensible to our organs, nor indicated by the thermometer; it forms a constituent part of the body; but it may be brought back to the state of sensible heat. In this state it affects animals with the sensation of heat. It therefore has been called sensible or free heat, or fire; and is synonymous with uncombined caloric, thermometrical caloric, caloric of temperature, interposed caloric, &c. expressions now pretty generally superseded.

From the diversity of opinions among chemists respecting the nature of caloric, several other expressions have been introduced, which it is proper to notice. For instance, by *specific heat* is understood, the relative quantities of caloric contained in equal weights of different bodies at the same temperature. *Latent heat* is the expression used to denote that quantity of caloric which a body absorbs when changing its form. It is, however, more properly called *caloric of fluidity*. The disposition, or property, by which different bodies contain certain quantities of caloric, at any temperature, is termed their *capacity for heat*. By the expression of *absolute heat*, is understood the whole quantity of caloric which any body contains.

Methods of exciting and collecting Heat.

Of the different methods of exciting heat, the following are the most usual:

1. *Production of Heat by Percussion or Collision.*

This method of producing heat is the simplest, and therefore it is generally made use of in the common purposes of life for obtaining fire.

When a piece of hardened steel is struck with a flint, some particles of the metal are scraped away from the mass, and so violent is the heat which follows the stroke, that it melts and vitrifies them. If the fragments of steel are caught upon paper, and viewed with a microscope, most of them will be found perfect spherules, and very highly polished. Their sphericity demonstrates that they have been in a fluid state, and the polish upon their surface, shews them to be vitrified.

No heat, however, has been observed to follow the percussion of liquids, nor of the softer kind of bodies which yield to a slight impulse.

2. *Production of Heat by Friction.*

Heat may likewise be excited by mere friction. This practice is still retained in some parts of the world. The natives of New Holland are said to produce fire in this manner, with great facility, and spread it in a wonderful manner. For that purpose, they take two pieces of dry wood; one is a stick, about eight or nine inches long, and the other piece is flat; the stick they bring to an obtuse point at one end, and pressing it upon the other piece, they turn it very nimbly, by holding it between both hands, as we do a chocolate-mill, often shifting their hands up, and then moving down upon it, in order to increase the pressure as much as possible. By this method, they get fire in a few minutes, and from the smallest spark they increase it with great speed and dexterity.

If the irons at the axis of a coach-wheel are applied to each other, without the interposition of some unctuous matter to keep them from immediate contact, they will become so hot when the carriage runs swiftly along, as to set the wood on fire; and the fore-wheels, being smallest, and making most revolutions in a given time, will be most in danger.

The same will happen to mill-work, or to any other machinery.

It is no uncommon practice in this country, for blacksmiths to use a plate of iron as an extemporaneous substitute for a tinder-box; for it may be hammered on an anvil till it becomes red-hot, and will fire a brimstone match. A strong man, who strikes quick, and keeps turning the iron so that both sides may be equally exposed to the force of the hammer, will perform this in less time than would be expected.

If, in the coldest season, one dense iron plate be laid on another, and pressed together by a weight, and then rubbed upon each other by reciprocal motions, they will gradually grow so hot as, in a short time, to emit sparks, and at last become ignited.

It is not necessary that the substances should be very hard; a cord rubbed backwards and forwards swiftly against a post or a tree will take fire.

Count Rumford and Professor Pictet have made some very ingenious and valuable experiments concerning the heat evolved by friction.

3. *Production of Heat by Chemical Action.*

To this belongs the heat produced by combustion. There are, besides this, many chemical processes wherein rapid chemical action takes place, accompanied with a developement of heat, or fire, and flame.

4. *Solar Heat.*

It is well known that the solar rays, when collected by a mirror, or lens, into a focus, produce the most astonishing effects.

Dr. Herschel has discovered that there are rays emitted from the sun, which have not the power of illuminating or producing vision: and that these are the rays which produce the heat of the solar light.

Consequently, heat is emitted from the sun in rays, but these rays are not the same with the rays of light.

5. *Production of Heat by the Electric Spark, and by Galvanism.*

The effects of electricity are too well known in this point of view, to need any description.

Galvanism has of late become a powerful instrument for the purpose of exciting heat. Not only easily inflammable substances, such as phosphorus, sulphur, &c. have been fired, but likewise gold, silver, copper, tin, and the rest of the metals, have been burnt by means of galvanism.

General Effects of Heat.

Expansive property of Heat. — This is the first and most obvious effect which heat produces on bodies. Experience has taught us that, at all times, when bodies become hot, they increase in bulk. The bodies experience a dilatation which is greater in proportion to the accumulation of caloric, or, in other words, to the intensity of the heat. This is a general law, which holds good as long as the bodies have suffered no change either in their combination or in the quantity of their chemical principles.

This power, which heat possesses, consists, therefore, in a constant tendency to separate the particles of bodies. Hence philosophers consider heat as the *repulsive power* which acts upon all bodies whatever, and which is in constant opposition to the power of attraction.

The phenomena which result from these mutual actions, seem, as it were, the secret springs of nature. Heat, however, does not expand all bodies equally, and we are still ignorant of the laws which it follows.

1. *Expansion of Fluid Bodies by Heat.*

Take a glass globe, with a long slender neck (called a bolt head); fill it up to the neck with water, ardent spirit, or any other fluid which may be coloured with red or black ink, in order to be more visible, and then immerse the globe of the instrument in a vessel of hot water; the included fluid will instantly begin to mount into the neck. If it be taken out of the water and brought near the fire, it will ascend more and more, in proportion as it becomes heated; but, upon removing it from the source of heat, it will sink again: a clear proof that caloric dilates it, so as to make it occupy more space when hot than when cold. These experiments may, therefore, serve as a demonstration that heat expands *fluid* bodies.

2. *Expansion of Aëriform Bodies by Heat.*

Take a bladder partly filled with air, the neck of which is closely tied, so as to prevent the inclosed air from escaping, and let it be held near a fire. The air will soon begin to occupy more space, and the bladder will become gradually distended; on continuing the expansion of the air, by increasing the heat, the bladder will burst with a loud report.

3. *Expansion of Solid Bodies by Heat.*

If we take a bar of iron, six inches long, and put it into a fire till it becomes red-hot; and then measure it in this state accurately, it will be found 1-20th of an inch longer than it was before; that is, about 120th part of the whole. That the metal is proportionally expanded in breadth, will be seen by trying to pass it through an aperture which it fitted exactly when cold, but which will not admit it when red-hot. The bar is, therefore, increased in length and diameter.

To discover the minutest changes of expansion by heat, and the relative proportions thereof, instruments have been contrived, called *Pyrometers*, the sensibility of which is so delicate as to shew an expansion of 1-100000th of an inch.

It is owing to this expansion of metals, that the motion of time-pieces is rendered erroneous; but the ingenuity of artists has discovered methods of obviating this inaccuracy, by employing the greater expansion of one metal, to counteract the expansion of another; this is effected in what is called the grid-iron pendulum. Upon the same principle a particular construction of watches has been contrived.

The expansion of metals is likewise one of the principal reasons that clocks and watches vary in winter and summer, when worn in the pocket, or exposed to the open air, or when carried into a hotter or a colder climate. For the number of the vibrations of the pendulum is always in the sub-duplicate ratio of its length, and as the length is changed by heat and cold, the times of vibration will be also changed. The quantity of alteration, when considered in a single vibration, is exceedingly small, but when they are often repeated, it will be very sensible. An alteration of one-thousandth part in the time of a single vibration of a pendulum which beats seconds, will make a change of eighty-six whole vibrations in twenty-four hours.

As different metals expand differently with the same degree of heat; those musical instruments, whose parts are to maintain a constant true proportion, should never be strung with different metals. It is on this account that harpsichords, &c. are out of tune by a change of temperature.

Bodies which are brittle, or which want

flexibility, crack or break, if suddenly heated. This likewise depends upon the expansive force of heat, stretching the surface to which it is applied, while the other parts, not being equally heated, do not expand in the same ratio, and are therefore torn asunder or break. Hence thin vessels stand heat better than thick ones. The same holds, when they are suddenly cooled.

Measurement of Heat.

Upon the expansive property of heat, which we have considered before, is founded its artificial measurement. Various means have been employed to assist the imperfection of our sensations in judging of the different degrees of heat, for our feelings unaided afford but very inaccurate information concerning this matter; they indicate the presence of *heat*, only when the bodies presented to them are *hotter* than the actual temperature of our organs of feeling. When those bodies are precisely of the same temperature with our body, which we make the standard of comparison, we then are not sensible of the presence of heat in them. When their temperature is less than that of our bodies, their contact gives us what is called the sensation of cold.

The effects of heat upon material bodies in general, which are easily visible to us, afford more precise and determinate indications of the intensity, than can be derived from our feelings alone. The ingenuity of the philosopher and artist has therefore furnished us with instruments for measuring the relative heat or temperature of bodies. These instrumeuts are called *Thermometers* and *Pyrometers*. By these, all degrees are measurable, from the slightest, to that of the most intense heat.

1. *Nature of the Thermometer.*

A thermometer is a hollow tube of glass, hermetically sealed, and blown at one end in the shape of a hollow globe. The bulb and part of the tube are filled with mercury, which is the only fluid which expands equally. When we immerse the bulb of the thermometer in a hot body, the mercury expands, and of course *rises* in the tube; but when we plunge it into a cold body, the mercury contracts, and of course *falls* in the tube.

The rising of the mercury indicates, therefore, an increase of heat; its falling, a diminution of it; and the quantity which it rises or falls, denotes the proportion of increase or diminution. To facilitate observation, the tube is divided into a number of equal parts, called degrees.

Further, if we plunge a thermometer ever so often into melting snow or ice, it will always stand at the same point. Hence we learn that *snow* or *ice* always begins to melt at the same temperature.

If we plunge a thermometer repeatedly into water kept boiling, we find that the mercury rises up to a certain point. This is therefore the point at which water always boils, provided the pressure of the atmosphere be the same.

There are four different thermometers used at present in Europe, differing from each other in the number of degrees into which the space between the freezing and boiling points is divided. These are Fahrenheit's, Reaumur's, Celsius's, and Delisle's.

The thermometer uniformly used in Britain, is Fahrenheit's; in this the freezing point is fixed at 32° — the boiling point, at 212° above 0° — or the part at which both the ascending and descending series of numbers commence.

In the thermometer which was first constructed by Reaumur, the scale is divided into a smaller number of degrees upon the same length, and contains not more than 80° between the freezing and the boiling points. The freezing point is fixed in this thermometer precisely at 0°, the term between the ascending and the descending series of numbers. Again, 100 is the number of the degrees between the freezing and the boiling points in the scale of Celsius; which has been introduced into France, since the revolution, under the name of the Centigrade thermometer; and the freezing point is in this, as in the thermometer of Reaumur, fixed at 0°. One degree on the scale of Fahrenheit, appears, from this account, to be equal to 4-9ths of a degree on that of Reaumur, and to 5-9ths of a degree on that of Celsius.

The space in Delisle's thermometer between the freezing and boiling points is divided into 150°, but the graduation begins at the boiling point, and increases towards the freezing point. The boiling point is marked 0, the freezing point 150°. Hence 180 F : =150 D, or 6 F : =5 D. To reduce the degrees of Delisle's thermometer *under* the boiling point to those of Fahrenheit; we have F : =212−6-5 D; to reduce those *above* the boiling point F : =212+6-5 D. Upon the knowledge of this proportion it is easy for the student to reduce the degrees of any of these thermometers into the degrees of any other of them.

2. *Nature of the Pyrometer.*

To measure those higher degrees of heat to which the thermometer cannot be applied, there have been other instruments invented by different philosophers: these are called *pyrometers*. The most celebrated instrument of this kind, and which has been adopted into general use, is that invented by the late ingenious Mr. Wedgwood.

This instrument is also sufficiently simple. It consists of two pieces of brass fixed on a plate, so as to be 6-10ths of an inch asunder at one end, and 3-10ths at the other; a scale is marked upon them, which is divided into 240 equal parts, each 1-10th of an inch; and with this his gauge, are furnished a sufficient number of pieces of baked clay, which must have been prepared in a red heat, and must be of given dimensions. These pieces of clay, thus prepared, are first to be applied cold, to the rule of the gauge, that there may no mistake take place in regard to their dimensions. Then any one of them is to be exposed to the heat which is to be measured, till it shall have been completely penetrated by it. It is then removed and applied to the gauge. The difference between its former and its present dimensions, will shew how much it has shrunk; and will consequently indicate to what degree the intensity of the heat to which it was exposed amounted.

High temperatures can thus be ascertained with accuracy. Each degree of Wedgwood's pyrometer is equal to 130° of Fahrenheit's.

Exceptions to the Expansion by Heat.

Philosophers have noticed a few exceptions to the law of heat expanding bodies. For instance; water, when cooled down within about 7° of the freezing point, instead of contracting on the farther deprivation of heat, actually expands.

Another seeming exception is manifested in alumine, or clay; others occur in the case of cast-iron, and a few other metals. Alumine contracts on being heated, and cast-iron, bismuth, &c. when fully fused, are more dense than when solid; for, as soon as they become so, they decrease in density, they expand in the act of cooling, and hence the sharpness of figures upon iron which has been cast in moulds, compared to that of many other metals.

Some philosophers have persuaded themselves that these exceptions are only *apparent*, but not really true. They say when water freezes, it assumes a crystalline form, the crystals cross each other and cause numerous vacuities, and thus the ice occupies more space. The same is the case with fused iron, bismuth, and antimony. The contraction of clay is considered owing to the loss of water, of which it loses a part at every increased degree of temperature hitherto tried; there is therefore a loss of matter; and a reduction of volume must follow: but others assert, that this only happens to a certain extent.

Mr. Tilloch has published a brief examination of the received doctrines respecting heat and caloric, in which these truths are more fully considered, together with many other interesting facts relative to the received notions of heat.

Equal Distribution of Heat.

If a number of bodies of different temperatures are placed in contact with each other, they will all at a certain time acquire a temperature, which is intermediate; the caloric of the hottest body will diffuse itself among those which are heated in a less degree, till they have all acquired a certain mean temperature. Thus, if a bar of iron which has been made red-hot be kept in the open air, it does not retain the heat which it had received, but becomes gradually colder and colder, till it arrives at the temperature of the bodies in its neighbourhood. On the other hand, if we cool down the iron bar by keeping it for some time covered with snow, and then carry it into a warm room, it does not retain its low temperature, but becomes gradually hotter, till it acquires the temperature of the room. It is therefore obvious, that in the one instance the temperature is lowered, and in the other it is raised.

These changes of temperature occupy a longer or a shorter time, according to the nature of the body, but they always take place at last. This law itself is, indeed, familiar to every one: when we wish to heat a body, we carry it towards the fire: when we wish to cool it, we surround it by cold bodies.

Propagation of Heat.

We have seen, that when bodies of higher temperature than others are brought into contact with each other, the heat is propagated from the first to the second, or the colder body deprives the warmer of its excess of heat. — We shall now see that some bodies do so much more quickly than others. Through some bodies caloric passes with undiminished velocity, through others its passage is prodigiously retarded.

This disposition of bodies of admitting, under equal circumstances, the refrigeration of a heated body within a shorter or a longer time, is called *the power of conducting heat*; and a body is said to be a *better* or *worse conductor of heat*, as it allows the refrigeration to go on quicker or slower. Those bodies, therefore, which possess the property of letting heat pass with facility, are called *good conductors*, those through which it passes with difficulty are called *bad conductors*, and those through which it is supposed not to pass at all, are called *non-conductors*: thus we say, in common language, some bodies are *warm*, or capable of preserving warmth, and from this arises the great difference in the sensation excited by different bodies, when applied at the same temperature to our organs of feeling. Hence, if we immerse our hand in mercury, we feel a greater sensation of cold than when we immerse it in water, and a piece of metal appears to be much colder than a piece of wood, though their temperatures, when examined by means of the thermometer, are precisely the same.

It is probable that all solids conduct heat in some degree, though they differ very much in their conducting power. Metals are the best conductors of heat; but the conducting powers of these substances are by no means equal. Stones seem to be the next best conductors. Glass conducts heat very slowly; wood and charcoal still slower; and feathers, silk, wool, and hair, are still worse conductors than any of the substances yet mentioned.

The best conductors of electricity and galvanism are also the best conductors of heat.

Experiment. — Take a number of straight wires, of equal diameters and lengths, but of different metals; for instance, gold, silver, copper, iron, &c.; cover each of them with a thin coat of wax, or tallow, and plunge their extremities into water, kept boiling, or into melted lead. The melting of the coat of wax will shew that caloric is more quickly transmitted through some metals than others.

It is on this account also, that the end of a glass rod may be kept red-hot for a long time, or even melted, without any inconvenience to the hand which holds the other extremity; though a similar metallic rod, heated in the same manner, would very soon become too hot to be held.

Liquid and Aëriform Bodies convey Heat by an actual Change in the Situation of their Particles.

Count Rumford was the first who proved that fluids in general, and aëriform bodies, convey heat on a different principle from that observed in solids. This opinion is pretty generally admitted, though various ingenious experiments have been made by different philosophers to prove the contrary. In water, for instance, the Count has proved that caloric is propagated principally in consequence of the motion which is occasioned in the particles of that fluid.

All fluids are considered by him, strictly speaking, in a similar respect as *non-conductors* of caloric. They can receive it, indeed, from other substances, and can give it to other substances, but no particle can either receive it from or give it to another particle of the same kind. Before a fluid, therefore, can be heated or cooled, every particle must go individually to the substance from which it receives or to which it gives out caloric. Heat being, therefore, only propagated in fluids, in consequence of the internal motion of their particles, which transport the heat; the more rapid these motions are, the more rapid is the communication of heat. The cause of these motions is the change in the specific gravity of the fluid, occasioned by the change of temperature, and the rapidity is in proportion to the change of the specific gravity of the liquid by any given change of temperature. The following experiment may serve to illustrate this theory.

Take a thin glass tube, eight or ten inches long, and about an inch in diameter. Pour into the bottom part, for about the depth of one inch, a little water coloured with Brazil-wood, or litmus, and then fill up the tube with common water, extremely gently, so as to keep the two *strata* quite distinct from each other. Having done this, heat the bottom part of the tube over a lamp; the coloured infusion will then ascend, and gradually tinge the whole fluid; on the contrary if the heat be applied above, the water in the upper part of the tube may be made to boil, but the colouring matter will remain at the bottom undisturbed. The heat cannot act downwards to make it ascend.

By thus being able to make the upper part of a fluid boil without heating the bottom part, water may be kept boiling for a considerable time in a glass tube over ice, without melting it.

Other experiments, illustrating the same principle, may be found in Count Rumford's excellent Essays, especially in Essay the 7th; 1797.

To this indefatigable philosopher we are wholly indebted for the above facts: he was the first who taught us that air and water were nearly non-conductors. The results of his experiments, which are contained in the above Essay, are highly interesting; they also show that the conducting power of fluids is impaired by the admixture of fibrous and glutinous matter.

Count Rumford proved that ice melted more than 80 times slower, when boiling-hot water stood on its surface, than when the ice was placed to swim on the surface of the hot water. Other experiments showed that water, only eight degrees of Fahrenheit above the freezing point, or at the temperature of forty degrees, melts as much ice, in any given time, as an equal volume of that fluid at any higher temperature, provided the water stands on the surface of the ice. Water, at the temperature of 41°, is found to melt more ice, when standing on its surface, than boiling water. It appears however that liquids are not, as he supposes, complete non-conductors of caloric: because if heat be applied at top, it is capable of making its way downwards, through water for example, though very imperfectly and slowly.

It becomes further evident, from the Count's ingenious experiments, that of the different substances used in clothing, hares' fur and eider-down are the warmest; next to these, beavers' fur, raw silk, sheep's wool, cotton wool, and lastly, lint, or the scrapings of fine linen. In fur, the air interposed among its particles is so engaged as not to be driven away by the heat communicated thereto by the animal body; not being easily displaced, it becomes a barrier to defend the animal body from the external cold. Hence it is obvious that those skins are warmest which have the finest, longest, and thickest fur; and that the furs of the beaver, otter, and other like quadrupeds, which live much in the water, and the feathers of water-fowl, are capable of confining the heat of those animals in winter, notwithstanding the coldness of the water which they frequent. Bears, and various other animals, inhabitants of cold climates, which do not often take the water, have their fur much thicker on their backs than on their bellies.

The snow which covers the surface of the earth in winter, in high latitudes, is doubtless designed as a garment to defend it against the piercing winds from the polar regions, which prevail during the cold season.

Without dwelling farther upon the philosophy of this truth, we must briefly remark that the happy application of this law, satisfactorily elucidates some of the most interesting facts of the economy of nature.

Theory of Caloric of Fluidity, or Latent Heat.

There are some bodies which, when submitted to the action of caloric, dilate to such a degree, and the power of aggregation subsisting among their particles is so much destroyed and removed to such a distance by the interposition of caloric, that they slide over each other in every direction, and therefore appear in a fluid state. This phenomenon is called *fusion*. Bodies thus rendered fluid by means of caloric, are said to be *fused*, or *melted*; and those that are subject to it, are called *fusible*.

The greater number of solid bodies may, by the application of heat, be converted into fluids. Thus metals may be fused; sulphur, resin, phosphorus, may be melted; ice may be converted into water, &c.

Those bodies which cannot be rendered fluid by any degree of heat hitherto known, are called *infusible*.

If the effects of heat under certain circumstances, be carried still further than is necessary to render bodies fluid, vaporization begins; the bodies then become converted into the vaporous or *gaseous state*. Vaporization, however, does not always require a previous fusion. Some bodies are capable of being converted into the vaporous state, without previously becoming fluid, and others cannot be volatilized at any temperature hitherto known: the latter are termed fixed.

Fluidity is therefore by no means essential to any species of matter, but always depends on the presence of a quantity of caloric. Solidity is the natural state of all bodies, and there can be no doubt that every fluid is capable of being rendered solid by a due reduction of temperature; and every solid may be fused by the agency of caloric, if the latter does not decompose them at a temperature inferior to that which would be necessary for their fusion.

Caloric of Fluidity.

Dr. Black was the first who proved that, whenever caloric combines with a solid body, the body becomes heated only, until it is rendered fluid: and that, while it is acquiring the fluid state, its temperature remains stationary, though caloric is continued to be added to it. The same is the case when fluids are converted into the aëriform or vaporous state.

From these facts, the laws of latent heat have been inferred. The theory may be illustrated by means of the following experiments.

If a lump of ice, at a low temperature, suppose at 22°, be brought into a warm room, it will become gradually less cold, as may be discovered by means of the thermometer. After a very short time, it will reach the temperature of 32°, (the freezing point); but there it stops. The ice then begins to melt; but the process goes on very slowly. During the whole of that time its temperature continues at 32°; and as it is constantly surrounded by warm air, we have reason to believe that caloric is constantly entering into it; yet it does not become hotter till it is changed into water. Ice, therefore, is converted into water by a quantity of caloric uniting with it.

It has been found by calculation, that ice in melting absorbs 140° of caloric, the temperature of the water produced still remaining at 32°.

This fact may be proved in a direct manner. Take one pound of ice, at 32°, reduced to a coarse powder; put it into a wooden bowl, and pour over it one pound of water, heated to 172°; all the ice will become melted, and the temperature of the whole fluid, if examined by a thermometer, will be 32°; 140° of caloric are therefore lost, and it is this quantity which was requisite to convert the ice into water. This experiment succeeds better, if, instead of ice, fresh-fallen snow be employed.

This caloric has been called *latent caloric*, because its presence is not measurable by the thermometer: also more properly caloric of fluidity.

Dr. Black has also ascertained by experiment, that the fluidity of melted wax, tallow, spermaceti, metals, &c. is owing to the same cause; and Landriani proved, that this is the case with sulphur, alum, nitrate of potash, &c.

We consider it therefore as a general law, that whenever a solid is converted into a fluid, it combines with caloric, and that is the cause of fluidity.

On the sudden transition of solids into fluids, is founded the well-known

Production of Artificial Cold, by Means of Frigorific Mixtures.

A number of experiments have been lately made by different philosophers, in order to produce artificial cold. And as these methods are often employed in chemistry, with a view to expose bodies to the influence of very low temperatures, we shall enumerate the different substances which may be made use of for that purpose, and the degrees of cold which they are capable of producing. We are indebted for them to Pepys, Walker, and Lowitz.

A TABLE OF FREEZING MIXTURES.

Mixtures.		*Thermometer sinks.*
Muriate of ammonia Nitrate of potash Water	5 parts 5 16	From 50° to 10°.
Muriate of ammonia Nitrate of potash Sulphate of soda Water	5 parts 5 8 16	From 50° to 4°.
Sulphate of soda Diluted nitric acid	3 parts 2	From 50° to —3°.
Sulphate of soda Muriatic acid	8 parts 5	From 50° to 0°.
Snow Muriate of soda	1 part 1	From 32° to 0°.
Snow, or pounded ice Muriate of soda	2 parts 1	From 0° to —5°.
Snow, or pounded ice Muriate of soda Muriate of ammonia and nitrate of potash	12 parts 5 5	From —5° to —18°.
Snow or pounded ice Muriate of soda Nitrate of ammonia	12 parts 5 5	From —18° to —25°.
Snow Diluted nitric acid	3 parts 2	From 0° to —46°.
Muriate of lime Snow	3 parts 2	From 32° to —50°.
Potash Snow	4 parts 3	From 32° to —51°.
Snow Diluted sulphuric acid Diluted nitric acid	8 parts 3 3	From —10° to —56°.
Snow Diluted sulphuric acid	1 part 1	From 20° to —60°.
Muriate of lime Snow	2 parts 1	From 0° to —66°.
Muriate of lime Snow	3 parts 1	From —40° to —73°.
Diluted sulphuric acid Snow	10 parts 8	From —68° to —91°.
Nitrate of ammonia Water	1 part 1	From 50° to 4°.
Nitrate of ammonia Carbonate of soda Water	1 part 1 1	From 50° to —7°.
Sulphate of soda Muriate of ammonia Nitrate of potash Diluted nitric acid	6 parts 4 2 4	From 50° to —10°.
Sulphate of soda Nitrate of ammonia Diluted nitric acid	6 parts 5 4	From 50° to —14°.
Phosphate of soda Diluted nitric acid	9 parts 4	From 50° to —12°.
Phosphate of soda Nitrate of ammonia Diluted nitric acid	9 parts 6 4	From 50° to —21°.
Sulphate of soda Diluted sulphuric acid	5 parts 4	From 50° to 3°.

Management of the preceding Mixtures for producing Cold.

To produce the effects before stated, the salts must be reduced to powder, and contain their full quantity of water of crystallization. The vessel in which the freezing mixture is made, should be very thin, and just large enough to hold it, and the materials should be mixed together as expeditiously as possible, taking care to stir the mixture at the same time with a rod of glass or wood.

In order to obtain the full effect, the materials ought to be first cooled to the temperature marked in *the table*, by introducing them into some of the other frigorific mixtures, and then mingling them together in a similar mixture. If, for instance, we wish to produce —46°, the snow and diluted nitric acid ought to be cooled dawn to 0°, by putting the vessel which contains each of them into the fifth freezing mixture in the above table, before they are mingled together. If a more intense cold be required, the materials to produce it are to be brought to the proper temperature by being previously placed in the second freezing mixture.

This process is to be continued till the required degree of cold has been procured.

Conversion of Solids and Fluids into the Aëriform or Gaseous State.

We have seen before, that in order to render solids fluid, a certain quantity of caloric is necessary, which combines with the body, and therefore cannot be measured by the thermometer; we shall now endeavour to prove, that the same holds good in respect to the conversion of solids or fluids into the vaporous or gaseous state.

Take a small quantity of carbonate of ammonia, introduce it into a retort, the neck of which is directed under a cylinder filled with mercury and inverted in a bason of the same fluid. On applying heat to the body of the retort, the carbonate of ammonia will be volatilised, it will expel the mercury out of the cylinder, and become an invisible gas, and would remain so, if its temperature was not lowered.

The same is the case with benzoic acid, camphire, and various other substances.

All fluids may, by the application of heat, be converted into an aëriform elastic state.

When we consider water in a boiling state, we find that this fluid, when examined by the thermometer, is not hotter after boiling several hours, than when it began to boil, though to maintain it boiling a brisk fire must necessarily be kept up. What then, we may ask, becomes of the wasted caloric? It is not perceptible in the water, nor is it manifested by the steam; for the steam, if not compressed, upon examination is found not to be hotter than boiling water. The caloric is therefore absorbed by the steam, and although what is so absorbed, is absolutely necessary for the conversion of water into the form of steam; it does not increase its temperature, and is therefore not appreciable by the thermometer.

The conclusion is further strengthened by the heat given out by steam on its being condensed by cold. This is particularly manifested in the condensation of this fluid in the process of distilling, where upon examining the refrigeratory, it will be found that a much greater quantity of caloric is communicated to it, than could possibly have been transmitted by the caloric which was sensibly acting before the condensation. This may be easily ascertained by observing the quantity of caloric communicated to the water in the refrigeratory of a still, by any given quantity of liquid that passes over.

1. The boiling point, or the temperature at which the conversion of fluids into gases takes place, is different in different fluids, but constant in each, provided the pressure of the atmosphere be the same.

Put any quantity of sulphuric ether into a Florence flask, suspend a thermometer in it, and hold the flask over an Argand's lamp, the ether will immediately begin to boil, and the thermometer will indicate 98°, if the ether has been highly rectified.

If highly rectified ardent spirit is heated in a similar manner, the thermometer will rise to 176°, and there remain stationary.

If water is substituted, it will rise to 212°.

If strong nitrous acid of commerce be made use of, it will be found to boil at 248°;—sulphuric acid and linseed-oil at 600°;—mercury at 656°, &c.

2. The boiling point of fluids is raised by pressure.

Mr. Watt heated water under a strong pressure to 400°. Yet still when the pressure was removed, only part of the water was converted into vapour, and the temperature of this vapour, as well as that of the remaining fluid, was no more than 212°. There was therefore 188° of caloric suddenly lost. This caloric was carried off by the steam. Now as only about one-fifth of the water was converted into steam, that steam must contain not only its own 188°, but also the 188° lost by each of the other four parts; that is to say, it must contain 188° × 5, or about 940°. Steam, therefore, is water combined with at least 940° of caloric, the presence of which is not indicated by the thermometer.

3. When pressure is removed from the surface of bodies, their conversion into the gaseous state is greatly facilitated, or their boiling point is lowered.

In proof of this the following experiments may serve:

Let a small bottle be filled with highly rectified sulphuric ether, and a piece of wetted bladder be tied over its orifice around its neck. Transfer it under the receiver of an air-pump, and take away the superincumbent pressure of the air in the receiver. When the exhaustion is complete, pierce the bladder by means of a pointed sliding wire, passing through a collar of leather which covers the upper opening of the receiver. Having done this, the ether will instantly begin to boil, and become converted into an invisible gaseous fluid.

Take a small retort or Florence flask, fill it one half or less with water, and make it boil over a lamp; when kept briskly boiling for about five minutes, cork the mouth of the retort as expeditiously as possible, and remove it from the lamp.

The water, on being removed from the source of heat, will keep boiling for a few minutes, and when the ebullition begins to slacken, it may be renewed by dipping the retort into cold water, or pouring cold water upon it.

The water during boiling, becomes converted into vapour; this vapour expels the air of the vessel, and occupies its place; on diminishing the heat, it condenses; when the retort is stopped, a partial vacuum is formed; the pressure becomes diminished, and a less degree of heat is sufficient to cause an ebullition.

For the same reason, water may be made to boil under the exhausted receiver at 94° Fahr. or even at a lower degree; alkohol at 56°; and ether at —20°.

On the conversion of fluids into gases is founded the following experiment, by which water is frozen by means of sulphuric ether.

Take a thin glass tube four or five inches long and about two or three-eighths of an inch in diameter, and a two-ounce bottle furnished with a capillary tube fitted to its neck. In order to make ice, pour a little water into the tube, taking care not to wet the outside, nor to leave it moist. Having done this, let a stream of sulphuric ether fall through the capillary tube upon that part of it containing the water, which by this means will be converted into ice in a few minutes, and this it will do even near a fire or in the midst of summer.

If the glass tube, containing the water, be exposed to the brisk thorough air, or free draught of an open window, a large quantity of water may be frozen in a shorter time; and if a thin spiral wire be introduced previous to the congelation of the water, the ice will adhere to it, and may thus be drawn out conveniently.

A person might be easily frozen to death during very warm weather, by merely pouring upon his body for some time sulphuric ether, and keeping him exposed to a thorough draught of air.

Artificial Refrigeration.

The cooling or refrigeration of rooms in the summer season by sprinkling them with water, becomes likewise obvious on this account.

The method of making ice artificially in the East Indies depends on the same principle. The ice-makers at Benares dig pits in large open plains, the bottom of which they strew with sugar-canes or dried stems of maize or Indian-corn. Upon this bed they place a number of unglazed pans, made of so porous an earth that the water penetrates through their whole substance. These pans are filled towards evening in the winter season with water that has boiled, and left in that situation till morning, when more or less ice is found in them, according to the temperature and other qualities of the air; there being more formed in dry and warm weather, than in that which is cloudy, though it may be colder to the human body.

Every thing in this process is calculated to produce cold by evaporation; the beds on which the pans are placed, suffer the air to have a free passage to their bottoms; and the pans constantly oozing out water to their external surface, are cooled by the evaporation of it.

In Spain, they use a kind of earthen jars, called buxaros, which are only half-baked, the earth of which is so porous, that the outside is kept moist by the water which filters through it, and though placed in the sun, the water in the jar becomes as cold as ice.

It is a common practice in China to cool wine or other liquors by wrapping the bottle in a wet cloth, and hanging it up in the sun. The water in the cloth becomes converted into vapour, and thus cold is produced.

The Blacks in Senegambia have a similar method of cooling water by filling tanned leather bags with it, which they hang up in the sun; the water oozes more or less through the leather so as to keep the outward surface wet, which by its quick and continued evaporation cools the water remarkably.

The winds on the borders of the Persian Gulph are often so scorching, that travellers are suddenly suffocated unless they cover their heads with a wet cloth; if this be too wet, they immediately feel an intolerable cold, which would prove fatal if the moisture was not speedily dissipated by the heat.

Condensation of Vapour.

If a cold vessel is brought into a warm room, particularly where many people are assembled, the outside of it will soon become covered with a sort of dew.

Before some changes of weather, the stone pavements, the walls of a house, the balustrades of staircases and other solid objects, feel clammy and damp.

In frosty nights, when the air abroad is colder than the air within, the dampness of this air, for the same reason, settles on the glass panes of the windows, and is there frozen into curious and beautiful figures.

Thus *fogs* and *dews* take place, and in the higher regions *clouds* are formed from the condensed vapour. The still greater condensation produces *mists* and *rain*.

Capacity of Bodies for containing Heat.

The property which different bodies possess, of containing at the same temperature, and in equal quantities, either of mass or bulk, unequal quantities of heat, is called their capacity for heat. The capacities of bodies for heat are therefore considered as great or small in proportion as their temperatures are either raised by the addition, or diminished by the deprivation, of equal quantities of heat, in a less or a greater degree.

In homogeneous bodies, the quantities of caloric which they contain are in the ratio of their temperature and mass: when therefore equal quantities of water, of oil, or of mercury, of unequal temperatures, are mingled together, the temperature of the whole will be the *arithmetical* mean between the temperatures of the two quantities that had been mixed together. It is a self-evident truth that this should be the case, for the particles of different portions of the same substance being alike, their effects must be equal. For instance:

Mix a pound of water at 172° with a pound at 32°, half the excess of heat in the hot water will quit it to go over into the colder portion; thus the hot water will be cooled 70°, and the cold will receive 70° of temperature; therefore $172-70$, or $32+70=102$ will give the heat of the mixture. To attain the arithmetical mean very exactly, several precautions however are necessary.

When heterogeneous bodies of different temperatures are mixed together, the temperature produced is never the arithmetical mean of the two original temperatures.

In order to ascertain the comparative quantities of heat of different bodies, equal weights of them are mingled together; the experiments for this purpose being in general more easily executed than those by which they are compared from equal bulks.

Thus, if one pound of mercury heated to 110° Fahr., be added to one pound of water of 44°, the temperature of the blended fluids will not be changed to 77°, as it would be if the surplus of heat were divided among those fluids in the proportion of their quantities. It will be found, on examination, to be only 47°.

On the contrary, if the pound of mercury be heated to 44°, and the water to 110°, then on stirring them together, the common temperature will be 107°.

Hence, if the quicksilver loses by this distribution 63° of caloric, an equal weight of water gains only 3° from this loss of 63° of heat. And on the contrary, if the water loses 3°, the mercury gains 63°.

When, instead of comparing the quantities of caloric which equal *weights* of different bodies contain, we compare the quantities contained in equal *volumes*, we still find that an obvious difference takes place. Thus it is found by experiment, that the quantity of caloric necessary to raise the temperature of a given volume of water any number of degrees, is, to that necessary to raise an equal volume of mercury, the same number of degrees as 2 to 1. This is therefore the proportion between the comparative quantities of caloric which these two bodies contain, estimated by their volumes; and similar differences exist with respect to every other kind of matter.

From the nature of the experiments by which the quantities of caloric which bodies contain are ascertained, it is evident that we discover merely the *comparative*, not the *absolute* quantities. Hence water has been chosen as a standard, to which other bodies may be referred; its capacity is stated as the arbitrary term of 1000, and with this the capacities of other bodies are compared.

It need not be told that pains have been taken to estimate on these experiments that portion of heat which diffuses itself into the air, or into the vessel where the mercury and water are blended together. As however such valuations cannot be made with complete accuracy, the numbers stated above are only an approximation to truth.

Radiation of Caloric.

Caloric is thrown off or radiates from heated bodies in right lines, and moves through space with inconceivable velocity. It is retarded in its passage by atmospheric air, by colourless fluids, glass, and other transparent bodies.

If a glass mirror be placed before a fire, the mirror transmits the rays of light, but not the rays of heat.

If a plate of glass, talc, or a glass vessel filled with water be suddenly interposed between the fire and the eye, the rays of light pass through it, but the rays of caloric are considerably retarded in its passage; for no heat is perceived until the interposed substance is saturated with heat, or has reached its *maximum*. It then ceases to intercept the rays of caloric, and allows them to pass as freely as the rays of light.

It has been lately shown by Dr. Herschel, that the rays of caloric are refrangible, but less so than the rays of light; and the same philosopher has also proved by experiment, that it is not only the rays of caloric emitted by the sun, which are refrangible, but likewise the rays emitted by common fires, by candles, by heated iron, and even by hot water.

Whether the rays of caloric are differently refracted, in different mediums, has not yet been ascertained. We are certain however, that they are refracted by all transparent bodies which have been employed as burning glasses.

The rays of caloric are also reflected by polished surfaces, in the same manner as the rays of light.

This was long ago noticed by Lambert, Saussure, Scheele, Pictet, and lately by Dr. Herschel.

Professor Pictet placed two concave metallic mirrors opposite to each other, at the distance of about twelve feet. When a hot body, an iron bullet for instance, was placed in the focus of the one, and a mercurial thermometer in that of the other, a substance radiated from the bullet; it passed with incalculable velocity through the air, it was reflected from the mirrors, it became concentrated, and influenced the thermometer placed in the focus, according to the degree of its concentration.

An iron ball two inches in diameter, heated so that it was not luminous in the dark, raised the thermometer not less than ten and a half degrees of Reaumur's scale, in six minutes.

A lighted candle occasioned a rise in the thermometer nearly the same.

A Florence flask containing two ounces and three drachms of boiling water, raised Fahrenheit's thermometer three degrees. He blackened the bulb of his thermometer, and found that it was more speedily influenced by the radiation than before, and that it rose to a greater height.

M. Pictet discovered another very singular fact; namely, the *apparent radiation of cold.* When, instead of a heated body, a Florence flask full of ice or snow is placed in the focus of one of the mirrors, the thermometer placed in the focus of the other immediately descends, and ascends again whenever the cold body is removed.

This phenomenon may be explained on the supposition, that from every body at every temperature caloric radiates, but in less quantity as the temperature is low; so that in the above experiment, the thermometer gives out more caloric by radiation, than it receives from the body in the opposite focus, and therefore its temperature is lowered. Or, as Pictet has supposed, when a number of bodies near to each other have the same temperature, there is no radiation of caloric, because in all of them it exists in a state of equal tension; but as soon as a body at an inferior temperature is introduced, the balance of tension is broken, and caloric begins to radiate from all of them, till the temperature of that body is raised to an equality with theirs. In the above experiment therefore, the placing the snow or ice in the focus of the mirror causes the radiation of caloric *from* the thermometer, and hence the diminution of temperature which it suffers.

These experiments have been since repeated by Dr. Young and Professor Davy, at the theatre of the Royal Institution. These gentlemen inflamed phosphorus by reflected caloric; and proved that the heat thus excited, was very sensible to the organs of feeling.

It is therefore evident, that caloric is thrown off from bodies in rays, which are invisible, or incapable of exciting vision, but which are capable of exciting heat.

These invisible rays of caloric are propagated in right lines, with extreme velocity; and are capable of the laws of reflection and refraction.

The heating agency however is different in the different coloured rays of the prismatic spectrum. According to Dr. Herschel's experiments, it follows inversely the order of the refrangibility of the rays of light. The least refrangible, possessing it in the greatest degree.

Sir Henry Englefield has lately made a series of experiments on the same subject, from which we learn, that a thermometer having its ball blackened, rose when placed in the *blue* ray of the prismatic spectrum in 3′ from 55° to 56°; in the *green*, in 3′ from 54° to 58°; in the *yellow*, in 3′ from 56° to 62°; in the *full red* in 2½′ from 56° to 72°; in the *confines of the red*, in 2½′ from 58° to 73½°; and *quite out of the visible light*, in 2½′ from 61° to 79°.

Between each of the observations, the thermometer was placed in the shade so long as to sink it below the heat to which it had risen in the preceding observation, of course its rise above that point could only be the effect of the ray to which it was exposed. It was continued in the focus long after it had ceased to rise; therefore the heats given are the greatest effects of the several rays on the thermometer in each observation. A thermometer placed constantly in the shade near the apparatus, was found scarcely to vary during the experiments.

Sir Henry made other experiments with thermometers with naked balls, and with others whose balls were painted white, for which we refer the reader to the interesting paper of the Baronet, from which the above experiments are transcribed.

The coloured rays emitted from the sun, and combustible bodies, since they excite heat and vision, must consist of a mixture of heat-making rays, and rays of light.

And as the rays of heat and light accompany each other, when emitted from luminous bodies, the velocity with which the rays of caloric move, must be equal to that of light, and hence its particles must be equally minute. They differ however in this particular, that the rays of light produce the sensation of vision, and possess certain chemical properties, whilst in those of caloric the peculiar agency of heat resides.

CALORI′METER. An instrument by which the whole quantity of absolute heat existing in a body in chemical union can be ascertained.

CA′LTHA. (Καλθα, corrupted from χαλχα, yellow, from whence, says Vossius, come calthula, caldula, caledula, calendula.) Marsh marigold.

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.*

2. The pharmacopœial name of the herb wild marigold, so called from its colour.

Ca′ltha arve′nsis. *Calendula arvensis. Caltha vulgaris.* The wild marigold is sometimes preferred to the garden marigold. Its juice is given, from one to four ounces, in jaundice and cachexia; and the leaves are commended as a salad for children afflicted with scrophulous humours.

Ca′ltha palu′stris. Common single marsh marigold. It is said to be caustic and deleterious: but this may be questioned. The young buds of this plant make, when properly pickled, very good substitutes for capers.

Ca′ltha vulga′ris. See *Caltha arvensis.*

Ca′lthula. The caltha is so called.

Caltrops. See *Trapa natans.*

CALU′MBA. The name now adopted by the London college of physicians for the columbo. *Colombo. Calomba. Colomba.* The root formerly so called, is now termed *Calumbæ radix* in the London pharmacopœia. It is imported from Colomba, in Ceylon, in circular, brown knobs, wrinkled on their outer surface, yellowish within, and consisting of cortical, woody, and medullary laminæ. Its smell is aromatic; its taste pungent, and very bitter. From Dr. Percival's experiments on the root, it appears that rectified spirit of wine extracts its virtues in the greatest perfection. The watery infusion is more perishable than that of other bitters. An ounce of the powdered root, half an ounce of orange-peel, two ounces of brandy, and fourteen ounces of water, macerated 12 hours without heat, and then filtered through paper, afford a sufficiently strong and tolerably pleasant infusion. The extract made first by spirit and then with water, and reduced by evaporation to a pilular consistence, is found to be equal, if not superior in efficacy, to the powder. As an antiseptic, Calumba root is inferior to the bark; but, as a corrector of putrid bile, it is much superior to the bark; whence also it is probable, that it would be of service in the West-India yellow fever. It also restrains alimentary fermentation, without impairing digestion; in which property it resembles mustard. It does not appear to have the least heating quality, and therefore may be used in phthisis pulmonalis, and in hectic cases, to strengthen digestion. It occasions no disturbance, and agrees very well with a milk diet, as it abates flatulence, and is indisposed to acidity. The London, Edinburgh, and Dublin colleges, direct a tincture of Calumba root. The dose of the powdered root is as far as half a drachm, which, in urgent cases, may be repeated every third or fourth hour.

Ca′lva. (From *calvus,* bald.) The scalp or upper part of the cranium or top of the head; so called because it often grows bald first.

CALVA′RIA. (From *calvus,* bald.) The upper part of the cranium which becomes soon bald. It means all above the orbits, temples, ears and occipital eminence.

Calvi′ties. (From *calvus,* bald.) *Calvitium.* Baldness; want or loss of hair, particularly upon the sinciput.

CALX. (-*cis,* fœm. from *kalah,* to burn. Arab.) 1. Chalk. Limestone.

2. Lime. *Calx viva.* The London College direct it to be prepared thus: — Take of limestone one pound: break it into small pieces, and heat it in a crucible, in a strong fire, for an hour, or until the carbonic acid is entirely driven off, so that on the addition of acetic acid, no bubbles of gas shall be extricated. Lime may be made by the same process from oyster-shells previously washed in boiling water, and cleared from extraneous matters. See *Lime.*

Ca′lcis li′quor. Solution of lime, formerly called *aqua calcis.* Lime-water. "Take of lime, half a pound; boiling distilled water, twelve pints. Pour the water upon the lime, and stir them together; next cover the vessel immediately, and let it stand for three hours; then keep the solution upon the remaining lime in stopped glass bottles, and pour off the clear liquor when it is wanted for use."

Lime is soluble in about 450 times its weight of water, or little more than one grain in one fluid-ounce. It is given internally, in doses of two ounces and upwards, in cardialgia, spasms, diarrhœa, &c. and in proportionate doses in convulsions of children arising from acidity, or ulcerated intestines, intermittent fevers, &c. Externally it is applied to burns and ulcers.

Ca′lcis mu′rias. *Calx salita. Sal ammoniacus fixus.* Muriate of lime. "Take of the salt remaining after the sublimation of subcarbonate of ammonia two pounds, water a pint; mix and filter through paper. Evaporate the salt to dryness: and preserve it in a closely stopped vessel." This preparation is exhibited with the same views as the muriate of barytes. It possesses deobstruent, diuretic, and cathartic virtues, and is much used by the celebrated Fourcroy against scrophula, and other analogous diseases. Six, twelve, and twenty grains, are given to children three times a day, and a drachm to adults.

Ca'lcis muria'tis li'quor. "Take of muriate of lime two ounces, distilled water three fluid-ounces; dissolve the salt in the water, and filter it through paper."

Calx antimo'nii. See *Antimonii oxydum.*

Calx cum ka'li pu'ro. The preparation formerly called by this name, is now termed, in the London pharmacopœia, potassa cum calce.

Calx hydra'rgyri a'lba. See *Hydrargyrum præcipitatum album.*

Calx viva. See *Calx.*

Caly'pter. (From καλυπτω, to hide.) A carneous excrescence covering the hemorrhoidal vein.

Ca'mara. (From καμαρα, a vault.) *Camarium.* The fornix of the brain: also the vaulted part of the auricle of the heart.

Cama'rium. (From Καμαρα, a vault.) See *Camara.*

Camaro'ma. (From καμαρα, a vault.) *Camarosis. Camaratio.* A fracture of the skull, in the shape of an arch or vault.

Ca'mbing. A tree of the Molucca islands, whose bark has been recommended in dysenteries.

Cambirea. So Paracelsus calls the venereal bubo.

Ca'mbium. (From *cambio,* to exchange.) That nutritious humour which is changed into the matter of which the body is composed.

Cambo'dia. See *Stalagmitis.*

Cambo'gia. (From the province of *Cambaya,* in the East Indies; called also *Cambodja* and *Cambogia;* hence it has obtained its names of *Cambodia. Cambogium. Gambogia. Gambogium.*) See *Stalagmitis.*

Cambo'gia gu'tta. See *Stalagmitis.*

Cambo'gium. (From the province of Cambogia, whence it was brought.) See *Stalagmitis.*

Cambro-brita'nnica. See *Rubus Chamæmorus.*

Cambu'ca. *Cambuta membrata.* So Paracelsus calls the venereal cancer. Also by some it is described as a bubo, an ulcer, an abscess on the pudenda; also a boil in the groin.

Ca'mbui. The wild American myrtle of Piso and Margrave, which is said to be astringent.

Camel's hay. See *Andropogon Schœnanthus.*

CA'MERA. Chamber or cavity. The chambers of the eye are termed cameræ.

Camera'tio. See *Camaroma.*

Ca'mes. *Camet.* Silver.

Cami'nga. See *Canella alba.*

Ca'minus. A furnace and its chimney. In Rulandus it signifies a bell.

Cami'sia fœ'tus. (From the Arabic term *kamisah,* an under garment.) The shirt of the fœtus. It is frequently put for the chorion.

Ca'momile. See *Anthemis nobilis.*

Ca'momile, stinking. See *Anthemis cotula.*

Camomi'lla. Corrupted from chamæmelum.

Ca'mmorum. (καμμορον, *quia homines,* κακῳ μορῳ, *perimat;* because if eaten, it brings men to a miserable end.) A species of monkshood. See *Aconitum.*

Campa'na. A bell. In Chemistry, a receptacle like a bell, for making sulphuric acid; thus the oleum sulphuris per campanam.

CAMPA'NULA. (From *campana,* a bell, named from its shape.) The bell-flower. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Ca'mpe. (From καμπτω, to bend.) A flexure or bending. It is also used for the ham, and a joint, or articulation.

Campea'chy wood. See *Hæmatoxylon Campechianum.*

Campeche'nse li'gnum. See *Hæmatoxylon Campechianum.*

CAMPER, Peter, was born at Leyden in 1722, where he studied under Boerhaave, and took his degree in medicine. He then travelled for some years, and was afterwards appointed a professor successively at Franeker, Amsterdam, and Groningen. He was subsequently occupied in prosecuting his favourite studies, in visiting various parts of Europe, by the different societies of which he was honourably distinguished, and in performing many public duties in his own country, being at length chosen one of the council of state. He died in 1789 of a pleurisy. He published some improvements in midwifery and surgery, but anatomy appears to have been his favourite pursuit. He finished two parts of a work of considerable magnitude and importance, in which the healthy and morbid structure of the arm, and of the pelvis, are exhibited in very accurate plates, from drawings made by himself: which he appears to have purposed extending to the other parts of the body. There are also some posthumous works of Camper possessing great merit, partly on subjects of natural history, partly evincing the connection between anatomy and painting; in which latter judicious rules are laid down for exhibiting the diversity of features in persons of various countries and ages, and representing the different emotions of the mind in the countenance, also for delineating the general forms of other animals, which he shews to be modified according to their economy.

Ca'mphire. See *Laurus camphora.*

Ca'mphor. See *Laurus camphora.*

CA'MPHORA. (*Camphura,* Arab.

The antients by camphor meant what now is called asphaltum, or Jews' pitch; καφουρα.) See *Laurus camphora*.

Ca'mphoræ flo'res. The subtile substance which first ascends in subliming camphor. It is nothing more than the camphor.

Ca'mphoræ flo'res compo'siti. Camphor sublimed with benzoin.

CA'MPHORAS. A salt formed by the union of the camphoric acid with different bases: thus *camphorate of alumine, camphorate of ammonia*, &c.

Camphora'sma. (From *camphora*; so called from its camphor-like smell.) Turkey balsam. See *Dracocephalum*.

Camphora'ta. See *Camphorosma*.

Camphora'tum o'leum. A mixture of olive oil, two parts, with one of camphor: of use in inflammatory swellings of the throat, if mixed with a proper cataplasm and applied to it. In ascites, when the abdomen is much distended, if rubbed on freely every night and morning, it is supposed to be useful.

CAMPHORIC ACID. *Acidum camphoricum*. If nitric acid be distilled several times (six or eight) from camphor, a crystallized salt is obtained, called the acid of camphor, which reddens syrup of violets and the tincture of turnsole. Its taste is bitter, and it differs from oxalic acid, in not precipitating lime from the muriatic acid. The union of this acid with different bases forms what are called *camphorates*, none of which have yet been used medicinally.

CAMPHORO'SMA. (From *camphora*, and οσμη, smell; so called from its smelling of camphire.) The camphor-smelling plant.

1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Monogynia*.

2. The pharmacopœial name of the camphorata. See *Camphorosma Monspeliensis*.

Camphorosma Monspeliensis. The systematic name of the plant called camphorata in the pharmacopœias. *Chamæpeuce. Camphorata hirsuta. Camphorosma Monspeliaca.* Stinking ground-pine. This plant, *Camphorosma Monspeliensis; foliis hirsutis linearibus*, of Linnæus, took its name from its smell resembling so strongly that of camphor: it has been exhibited internally, in form of decoction, in dropsical and asthmatic complaints, and by some is esteemed in fomentations against pain. It is rarely, if ever, used in modern practice.

Ca'mpter. (From καμπτω, to bend.) An inflexion or incurvation.

Ca'mpulum. (From καμπτω, to twist about.) A distortion of the eyelids or other parts.

Campylo'tis. (From καμπυλος, bent.) A preternatural incurvation, or recurvation of a part; also, a distortion of the eyelids.

Ca'mpylum. See *Campylotis*.

Ca'nabil. A sort of medicinal earth.

Canabi'na aquatica. See *Bidens*.

Ca'nabis I'ndica. See *Bangue* and *Cannabis*.

Ca'nabis peregri'na. See *Cannabis*.

Ca'nada balsam. See *Pinus Balsamea*.

Canade'nsis. (Brought from *Canada*.) A name of a balsam. See *Pinus balsamea*.

CANA'LES SEMICIRCULA'RES. Semicircular canals. There are three in each ear placed in the posterior part of the labyrinth. They open by five orifices into the vestibulum. See *Ear*.

Canali'culus. (Dim. of *canalis*, a channel.) A little canal. See *Canalis arteriosus*.

CANA'LIS. (From χανος, an aperture, or rather from *canna*, a reed.) A canal. A hollow round instrument like a reed, for embracing and holding a broken limb. The hollow of the spine. Also it is specifically applied to many parts of the body; as *canalis venosus*.

CANA'LIS ARTERIO'SUS. *Canaliculus arteriosus. Canalis Botalii.* A blood-vessel peculiar to the fœtus, disappearing after birth; through which the blood passes from the pulmonary artery into the aorta.

CANA'LIS NASA'LIS. A canal going from the internal canthus of the eye downwards into the nose: it is situated in the superior maxillary bone, and is lined with the pituitary membrane continued from the nose.

CANA'LIS PETITIA'NUS. A triangular cavity, naturally containing a moisture, between the two laminæ of the hyaloid membrane of the eye, in the anterior part, formed by the separation of the anterior lamina from the posterior. It is named after its discoverer, M. Petit.

Cana'lis semispetros. The half bony canal of the ear.

CANA'LIS VENO'SUS. A canal peculiar to the fœtus, disappearing after birth, that conveys the maternal blood from the *porta* of the liver to the ascending *vena cava*.

Cana'ry balm. See *Dracocephalum*.

Ca'ncamum Græco'rum. See *Hymenæa Courbaril*.

CANCE'LLI. Lattice-work; generally applied to the reticular substance in bones.

Cance'llus. (From *cancer*, a crab.) The wrong heir. Bernard the hermit. A species of cray-fish supposed to cure rheumatism, if rubbed on the part.

CA'NCER. (From καρκινος, a crab; so called by the antients, because it exhibited large blue veins like crab's claws.)

1. The name of a crab fish, from which the *chelæ cancrorum*, and *oculi cancrorum*, or *lapides cancrorum* are produced. The shell fish so called is the *Cancer astacus* of Linnæus: the officinal preparations are nevertheless obtained also from the *cancer gammarus, maeurus*, and *pagurus* of Linnæus.

Crab's claws and crab's eyes, as they are called, which are concretions found in the stomach, are of a calcareous quality, and possess antacid virtues. They are exhibited with their compounds in pyrosis, diarrhœa, and infantile convulsions from acidity.

2. The name of a disease likewise called *Carcinoma, carcinos* by the Greeks, *Lupus* by the Romans, because it eats away the flesh like a wolf. Dr. Cullen places this genus of disease in the class *locales,* and order *tumores.* He defines it a painful scirrhous tumour, terminating in a fatal ulcer. Any part of the body may be the seat of cancer, though the glands are most subject to it. It is distinguished according to its stages into *occult* and *open*; by the former is meant its scirrhous state, which is a hard tumour that sometimes remains in a quiet state for many years. When the cancerous action commences in it, it is attended with frequent shooting pains: the skin that covers it, becomes discoloured, and ulceration sooner or later takes place: when the disease is denominated *open* cancer. Mr. Pearson says, " When a malignant scirrhus or a watery excrescence, hath proceeded to a period of ulceration, attended with a constant sense of ardent and occasionally shooting pains, is irregular in its figure, and presents an unequal surface; if it discharges sordid, sanious or fetid matter; if the edges of the sore be thick, indurated, and often exquisitely painful, sometimes inverted, at other times retorted, and exhibit a serrated appearance; and should the ulcer in its progress be frequently attended with hæmorrhage, in consequence of the erosion of blood-vessels; there will be little hazard of mistake in calling it a cancerous ulcer." In men, a cancer most frequently seizes the tongue, mouth, or penis; in women, the breasts or the uterus, particularly about the cessation of their periodical discharges; and in children, the eyes. The following description of Scirrhus and Cancer, from the above writer, will serve to elucidate the subject. A hard unequal tumour that is indolent and without any discoloration in the skin, is called a scirrhus; but when an itching is perceived in it, which is followed by a pricking, shooting, or lancinating pain, and a change of colour in the skin, it is usually denominated a cancer. It generally is small in the beginning, and increases gradually; but though the skin changes to a red or livid appearance, and the state of the tumour from an indolent to a painful one, it is sometimes very difficult to say when the scirrhus really becomes a cancer, the progress being quick or slow according to concurring causes. When the tumour is attended with a peculiar kind of burning, shooting pains, and the skin hath acquired the dusky purple or livid hue, it may then be deemed the malignant scirrhus or *confirmed cancer.* When thus far advanced in women's breasts, the tumour sometimes increases speedily to a great size, having a knotty unequal surface, more glands becoming obstructed, the nipple sinks in, turgid veins are conspicuous, ramifying around and resembling a crab's claws. These are the characteristics of an occult cancer on the external parts; and we may suspect the existence of one internally when such pain and heat as has been described, succeed in parts where the patient hath before been sensible of a weight and pressure, attended with obtuse pain. A cancerous tumour never melts down in suppuration like an inflammatory one; but when it is ready to break open, especially in the breast, it generally becomes prominent in some minute point, attended with an increase of the peculiar kind of burning, shooting pain, felt before at intervals, in a less degree and deeper in the body of the gland. In the prominent part of the tumour, in this state, a corroding ichor sometimes transudes through the skin, soon forming an ulcer: at other times a considerable quantity of a thin lymphatic fluid tinged with blood from eroded vessels is found on it. Ulcers of the cancerous nature discharge a thin, fetid, acrid sanies, which corrodes the parts, having thick dark-coloured retorted lips; and fungous excrescences frequently rise from these ulcers, notwithstanding the corrosiveness of the discharge. In this state they are often attended with excruciating, pungent, lancinating, burning pains, and sometimes with bleeding.

Though a scirrhus may truly be deemed a cancer, as soon as pain is perceived in it, yet every painful tumour is not a cancer; nor is it always easy to say whether a cancer is the disorder or not: irregular hard lumps may be perceived in the breast; but on examining the other breast, where no uneasiness is perceived, the same kind of tumours are sometimes found, which renders the diagnostic uncertain. Yet in every case after the cessation of the catamenia, hard unequal tumours in the breast are suspicious; nor, though without pain, are they to be supposed indolent or innoxious.

In the treatment of this disease our chief reliance must be on extirpating the part affected. Some have attempted to dispel the scirrhous tumour by leeches, and various discutient applications, to destroy it by caustics, or to check its progress by narcotics; but without material success. Certainly, before the disease is confirmed, should any inflammatory tendency appear, antiphlogistic means may be employed with propriety; but afterwards the operation should not be delayed: nay where the nature of the tumour is doubtful, it will be better to remove it, than incur the risk of this dreadful disease. Some surgeons indeed have contested the utility of the operation; and no doubt the disease will sometimes appear again; from constitutional tendency, or from the whole not having been removed: but the balance of evidence is in favour of the operation being successful, if performed early and to an adequate extent. The plan of destroying the part by caustic is much more tedious, painful, and uncertain. When the disease has arisen from some accident, not spontaneously, when the patient is otherwise healthy, when no symptoms of malignancy in the cancer have appeared, and the adjacent glands and absorbents seem unaffected, we have stronger expectation of success: but unless all the morbid parts can be removed without the risk of dividing important nerves or arteries, it should scarcely be attempted. In operating it is advisable; 1. To make the external wound sufficiently large, and nearly in the direction of the subjacent muscular fibres. 2. To save skin enough to cover it, unless diseased. 3. To tie every vessel, which might endanger subsequent hæmorrhage. 4. To keep the lips of the wound in contact, not interposing any dressing, &c. 5. To preserve the parts in an easy and steady position for some days, before they are inspected. 6. To use only mild and cooling applications during the cure. Supposing however the patient will not consent to an operation, or circumstances render it inadmissible, the uterus for example being affected, internal remedies may somewhat retard its progress, or alleviate the sufferings of the patient: those, which have appeared most beneficial, are, 1. Arsenic, in very small doses long continued. 2. Conium, in doses progressively increased to a considerable extent. 3. Opium. 4. Belladonna. 5. Solanum. 6. Ferrum ammoniatum. 7. Hydrargyri oxymurias. 8. The juice of the galium aparine. When the part is external, topical applications may be useful to alleviate pain, cleanse the sore, or correct the fœtor; especially, 1. Fresh-bruised hemlock leaves. 2. Scraped young carrots. 3. The fermenting poultice. 4. Finely levigated chalk. 5. Powdered charcoal. 6. Carbonic acid gas, introduced into a bladder, confined round the part. 7. A watery solution of opium. 8. Liquid tar, or tar water. But none of these means can be relied upon for effecting a cure.

Ca′ncer a′stacus. The systematic name of the fish from which the crab's claws are obtained. See *Cancer.*

Ca′ncer mundito′rum. Chimney sweeper's cancer.

Ca′nchrys. *Cachrys. Libanotis.* Galen says it sometimes means parched barley.

Cancre′na. Paracelsus uses this word instead of gangræna.

Cancro′rum che′læ. Crab's claws. See *Carbonas calcis,* and *Cancer.*

Cancro′rum o′culi. See *Carbonas calcis,* and *Cancer.*

Ca′ncrum o′ris. (From *cancer,* a spreading ulcer.) Canker of the mouth; called also aphthæ serpentes, gangræna oris, &c. See *Aphthæ.*

Cande′la. (From *candeo,* to shine.) A candle.

Cande′la fuma′lis. A candle made of odoriferous powders and resinous matters, to purify the air and excite the spirits.

Cande′la re′gia. See *Verbascum.*

Candela′ria. (From *candela,* a candle, so called from the resemblance of its stalks to a candle.) The herb mullein. See *Verbascum.*

Ca′ndy ca′rrot. See *Athamanta Cretensis.*

Cane′la. Sometimes used by the antients for cinnamon, or rather cassia.

CANE′LLA. (*Canella,* dim. of *canna,* a reed; so named because the pieces of bark are rolled up in the form of a reed.) The name of a genus of plants in the Linnæan system. Class, *Dodecandria.* Order, *Monogynia.* The canella-tree.

CANE′LLA A′LBA. The pharmacopœial name of the laurel-leaved canella. *Cortex Winteranus spurius. Canella Cubana. Winterania Canella* of Linnæus. The tree which produces the bark so called, is a native of the West Indies. It is brought into Europe in long quills, somewhat thicker than cinnamon; their taste is moderately warm, aromatic, and bitterish; and of an agreeable smell, somewhat resembling that of cloves. Canella alba has been supposed to possess considerable medicinal powers in the cure of scurvy and some other complaints. It is now merely considered as a useful and cheap aromatic, and is chiefly employed for the purpose of correcting, and rendering less disagreeable the more powerful and nauseous drugs; with which view it is used in the *tinctura amara, vinum amarum, vinum rhæi,* &c. of the Edinburgh Pharmacopœia.

Ca′nella Cuba′na. See *Canella alba.*

Ca′nella cuu′rdo. The true cinnamon-tree.

Cane′llæ Malaba′ricæ co′rtex. See *Laurus cassia.*

Canelli′fera Malaba′rica. See *Laurus cassia.*

Caneon. (From καννη, because it was made of split cane.) A sort of tube or instrument, mentioned by Hippocrates, for conveying the fumes of antihysteric drugs into the womb.

Ca′nica. A spice used in the island of Cuba, probably the pimento; or from some of the species of myrrhs.

Ca′nicæ. (From *canis.*) Coarse meal, was so called by the antients, from *canis,* a dog, because it was food for dogs. Hence *panis caniceus,* very coarse bread.

Canici′da. (From *canis,* a dog, and *cædo,* to kill; so called because dogs are destroyed by eating it.) The herb dog's bane, or aconitum. See *Aconitum.*

Canici′dium. (From *canis*, a dog, and *cædo*, to kill.) The anatomical dissection of living dogs.

Cani′na bra′ssica. The *mercurialis sylvestris* of Linnæus.

Cani′na li′ngua. The cynoglossum.

Cani′na ma′lus. The mandragora.

Cani′na ra′bies. The hydrophobia.

Canine. Whatever partakes of, or has any relation to the nature of a dog.

Canine appetite. See *Bulimia.*

Canine madness. See *Hydrophobia.*

CANINE TEETH. *Dentes canini. Cynodontes. Cuspidati* of Mr. John Hunter; because they have the two sides of their edge sloped off to a point, and this point is very sharp or cuspidated. *Columellares* of Varro and Pliny. The four eye-teeth are so called from their resemblance to those of the dog. They are situated, two in each jaw, on the side of the four middle or incisor teeth. Their fangs are longer than those of the incisores, and therefore from the fangs of those in the upper jaw being supposed to extend the greatest part of the way to the eye, they have been called the *eye-teeth.*

Cani′nus. (*Caninus*, sc. *musculus*; because it arises near the canine or eye-tooth.) See *Levator anguli oris.*

Cani′nus se′ntis. (From *canis*, a dog, and *sentis*, a thorn; from its being prickly like a thorn.) See *Rosa canina.*

Cani′ram. (Indian.) See *Strychnos nux vomica.*

Caniru′bus. (From *canis*, and *rubus*, a bramble.) See *Rosa canina.*

CA′NIS. A dog. The white dung of this animal, called *album græcum*, was formerly in esteem, but now disused.

This term was also applied to the frænum of the penis.

Ca′nis interfe′ctor. Indian caustic barley or cevadilla.

Ca′nis po′nticus. See *Castor.*

Ca′nna. (Heb.) A reed or hollow cane.

A name of the fibula from its resemblance to a reed.

Ca′nna fi′stula. See *Cassia fistula.*

Ca′nna I′ndica. The *Sagittaria alexipharmica.*

Ca′nna ma′jor. The tibia.

Ca′nna mi′nor cru′ris. A name formerly applied to the fibula.

Cannabi′na. (From *canna*, a reed; named from its reed-like stalk.) So Tournefort named the Datisca.

CA′NNABIS. (From *καννα*, a reed. Κανναϐοι are foul springs, wherein hemp, &c. grow naturally. Or from *kanaba*, from *kanah*, to mow. Arab.) Hemp.

1. The name of a genus of plants in the Linnæan system. Class, *Diœcia.* Order, *Pentandria.*

2. The pharmacopœial name of the hemp plant.

Ca′nnabis sati′va. The systematic name of the hemp plant. It has a rank smell of a narcotic kind. The effluvia from the fresh herb are said to affect the eyes and head, and that the water in which it has been long steeped is a sudden poison. Hemp-seeds, when fresh, afford a considerable quantity of oil. Decoctions and emulsions of them have been recommended against coughs, ardor urinæ, &c. Their use, in general, depends on their emollient and demulcent qualities. The leaves of an oriental hemp, called *bang* or *bangue*, and by the Egyptians *assis*, are said to be used in Eastern countries, as a narcotic and aphrodisiac. See *Bangue.*

Canna′corus radi′ce cro′cea. See *Curcuma.*

CA′NNULA. (Dim. of *canna*, a reed.) The name of a surgical instrument. See *Canula.*

Ca′non. (Κανων.) A rule or canon, by which medicines are compounded.

Cano′niai. (Κανονιαι.) Hippocrates in his book De Aëre, &c. calls those persons thus, who have straight, and not prominent bellies. He would intimate that they are disposed, as it were, by a straight rule.

Cano′picon. (From *κανωπον*, the flower of the elder.) A sort of spurge named from its resemblance; also a collyrium, of which the chief ingredient was elder flowers.

Canopi′te. The name of a collyrium mentioned by Celsus.

Cano′pum. (Κανωπον.) The flower or bark of the elder-tree, in Paulus Ægineta.

Canta′brica. See *Convolvulus.*

Canta′brum. (From *kanta*, Heb.) In Cœlius Aurelianus it signifies bran or furfur.

Ca′ntacon. Garden saffron.

Ca′ntara. The plant which bears the St. Ignatius's bean.

Ca′nthari figuli′ni. Earthen cucurbits.

CA′NTHARIS. (*Cantharis*, pl. *cantharides*: from *κανθαρος*, a beetle, to whose tribe it belongs.) See *Lytta.*

Ca′nthum. Sugar-candy.

CA′NTHUS. (Κανθος, the iron binding of a cart-wheel. Dr. Turton, in his glossary, supposes from its etymology, that it originally signified the circular extremity of the eyelid.) The angle or corner of the eye, where the upper and under eyelids meet. That next the nose is termed the internal or greater canthus, and the other, the external or lesser canthus.

Ca′ntion. An epithet for sugar.

Cantuarie′nsis a′qua. Canterbury water is strongly impregnated with iron, sulphur, and carbonic acid gas; it is recommended in disorders of the stomach, in gouty complaints, jaundice, diseases of the skin and chlorosis.

CA′NULA. (Dim. of *canna*, a reed.) A small tube. The term is generally applied to a tube adapted to a sharp instrument, with which it is thrust into a cavity or tumour, containing a fluid; the perforation being made, the sharp instrument is withdrawn, and the canula left, in order that the fluid may pass through it.

Canusa. Crystal.

Caoutchou'c. See *Indian rubber.*

Capaiva bálsam. See *Copaïfera officinalis.*

Capeli'na. (From *capeline,* a woman's hat, or bandage, French.) A double-headed roller put round the head.

Cape'lla. A cupel or test.

Caper-bush. See *Capparis.*

Ca'petus. (Καπετος, per aphæresin, pro σκαπετος; from σκαπτω, to dig.) Hippocrates means by this word a foramen, which is impervious and needs the use of a chirurgical instrument to make an opening; as the anus of some new-born infants.

Ca'phora. (Arab.) Camphire.

Ca'phura ba'ros indo'rum. A name for camphire.

Ca'phuræ o'leum. An aromatic essential oil distilled from the root of the cinnamon-tree.

Capilla'res vermi'culi. See *Crinones* and *Dracunculus.*

CAPI'LLARY. (*capillaris:* from *capillus,* a little hair; so called from the resemblance to hair or fine thread.) The very small ramifications of the arteries, which terminate upon the external surface of the body, or on the surface of internal cavities, are called capillary.

Capilla'tio. (From *capillus,* a hair.) A capillary fracture of the cranium.

CAPI'LLUS. (Quasi *capitis pilus,* the hair of the head.) The hair. Small, cylindrical, transparent, insensible, and elastic filaments, which arise from the skin, and are fastened in it by means of small roots. The human hair is composed of a spongy, cellular texture, containing a coloured liquid, and a proper covering. Hair is divided into two kinds: *long,* which arises on the scalp, cheek, chin, breasts of men, the anterior parts of the arms and legs, the arm pits groins, and pelvis: and *short,* which is softer than the long, and is present over the whole body, except only the palm of the hand and sole of the foot. The hair originates in the adipose membrane from an oblong membranous bulb, which has vessels peculiar to it. The hair is distinguished by different names in certain parts; as, *capillus,* on the top of the head: *crinis,* on the back of the head; *circrinnus,* on the temples; *cilium,* on the eyelids; *supercilium,* on the eyebrows; *vibrissa,* in the nostrils; *barba,* on the chin; *pappus,* on the middle of the chin; *mystax,* on the upper lip; *pilus,* on the body.

Capi'llus ve'neris. See *Adianthum.*

Capi'llus ve'neris Canade'nsis. The Adianthum Canadense.

Capiple'nium. (From *caput,* the head, and *plenus,* full.) A catarrh. It is a barbarous word; but Baglivi uses it to signify that continual heaviness or disorder in the head, which the Greeks call *Carebaria,* *καρηβαρια.*

Capistra'tio. (From *capistrum,* a bridle; so called because the præpuce is restrained as it were with a bridle.) See *Phimosis.*

Capi'strum. (From *caput,* the head.) A bandage for the head is so called. In Vogel's Nosology it is the same as *Trismus.*

CA'PITAL. The head or upper part of an alembic.

Capita'lia. (From *caput,* the head.) *Cephalics:* medicines which relieve disorders of the head.

Capite'llum. The head or seed vessels, frequently applied to mosses, &c. Some say it signifies soapy water, others say it is a lixivium.

Capitilu'vium. (From *caput,* the head, and *lavo,* to wash.) A lotion or bath for the head.

Cápitis oblíquus inférior et májor. See *Obliquus inferior capitis.*

Cápitis par tértium Fallópii. See *Trachelo-mastoideus.*

Cápitis postícus. See *Rectus capitis posticus major.*

Cápitis réctus. See *Rectus capitis posticus minor.*

Capi'tulum. (Dim. of *caput,* the head.)

1. A small head or protuberance of a bone, received into the concavity of another bone.

2. An alembic.

Capi'vi. (Indian.) A tree of Brazil, which affords the drug called balsam of capivi. See *Copaïfera officinalis.*

Capnelæ'um. (From καπνος, smoke, and ελαιον, oil; so named from its smoky exhalations when exposed to heat.) In Galen's works, it is said to be a resin.

Ca'pnias. (From καπνος, a smoke.) A jasper of a smoky colour. Also, a kind of vine which bears white and part black grapes.

Capni'ston. (From καπνος, smoke.) A preparation made of spices and oil, by kindling the spices, and fumigating the oil.

Capni'tis. (From καπνος, smoke; so called from its smoky colour.) Tutty.

Capnoi'des. (From καπνος, fumitory, and ειδος, likeness.) A species of fumitory.

Ca'pnos. Καπνος. Fumitory; so called, says Blanchard, because its juice, if applied to the eyes, produces the same effect and sensations as smoke.

Ca'po mola'go. The Piper Indicum.

Ca'ppa. (*à capite,* from the head; so called from its supposed resemblance.) The herb monkshood.

CA'PPARIS. (From *cabar,* Arab. or ϖαρα τό καππανειν αραν, from its curing madness and melancholy.) The caper plant.

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.*

2. The pharmacopœial name of the caper plant.

Ca'pparis spino'sa. The systematic name of the caper plant. *Capparis; pedunculis* *solitariis unifloris, stipulis spinosis, foliis annuis, capsulis ovalibus* of Linnæus. The buds, or unexpanded flowers of this plant, are in common use as a pickle, which is said to possess antiscorbutic virtues. The bark of the root was formerly in high esteem as a deobstruent.

Capreola′ris. (From *capreolus,* a tendril.) *Capreolatus.* Resembling in its contortions, or other appearance, the tendrils of a vine; as the spermatic vessels.

Capreola′tus. See *Capreolaris.*

Capre′olus. (Dim. of *caprea,* a tendril.) It means the helix or circle of the ear, from its tendril-like contortion. Dr. Turton suggests its derivation from *caper,* a goat, whose horn its contortions somewhat resemble.

Caprico′rnus. Lead.

Caprifi′cus. (From *caper,* a goat, and *ficus,* a fig; because they are a chief food of goats.) The wild fig-tree.

Capri′zans. Is by Galen and others used to express an inequality in the pulse, when it leaps, and, as it were, dances in uncertain strokes and periods.

Capse′lla. (Dim. of *capsa,* a chest, from its resemblance.) A name in Marcellus Empiricus for viper's bugloss.

CA′PSICUM. (From καπτω, to bite, on account of its effect on the mouth.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Guinea pepper.

2. The pharmacopœial name of the capsicum.

Ca′psicum annuum. The systematic name of the plant from which we obtain Cayenne pepper. *Piper Indicum. Lada chilli. Capo molago. Solanum urens. Siliquastrum Plinii. Piper Brazilianum. Piper Guineense. Piper Calecuticum. Piper Hispanicum. Piper Lusitanicum.* Cayenne pepper. Guinea pepper. This species of pepper is obtained from the *Capsicum; caule herbaceo, pedunculis solitariis* of Linnæus. What is generally used under the name of Cayenne pepper, however, is an indiscriminate mixture of the powder of the dried pods of many species of capsicum, but especially of the capsicum minimum, or bird pepper, which is the hottest of all. These peppers have been chiefly used as condiments. They prevent flatulence from vegetable food, and give warmth to the stomach, possessing all the virtues of the oriental spices, without producing those complaints of the head which the latter are apt to occasion. An abuse of them, however, gives rise to visceral obstructions, especially of the liver. In the practice of medicine, there can be little doubt that they furnish us with one of the purest and strongest stimulants which can be introduced into the stomach, and may be very useful in some paralytic and gouty cases. Dr. Adair, who first introduced them into practice, found them useful in the cachexia Africana, which he considers as a most frequent and fatal predisposition to disease among the slaves. Dr. Wright says, that in dropsical and other complaints where chalybeates are indicated, a minute portion of powdered capsicum forms an excellent addition, and recommends its use in lethargic affections. This pepper has also been successfully employed in a species of cynanche maligna, which proved very fatal in the West-Indies, resisting the use of Peruvian bark, wine, and other remedies commonly employed. In tropical fevers, coma and delirium are common attendants; and in such cases, cataplasms of capsicum have a speedy and happy effect. They redden the parts, but seldom blister unless when kept on too long. In ophthalmia from relaxation, the diluted juice of capsicum is found to be a valuable remedy. Dr. Adair gave six or eight grains for a dose, made into pills; or else he prepared a tincture by digesting half an ounce of the pepper in a pound of alkohol, the dose of which was one or two drachms, diluted with a sufficient quantity of water. A *tinctura capsici* is now for the first time introduced into the London pharmacopœia.

CA′PSULA. (Dim. of *capsa,* a chest or case.) A term given by anatomists to any membranous production enclosing a part of the body like a bag; as the capsular ligaments, the capsule of the crystalline lens, &c.

Ca′psulæ atrabila′riæ. See *Renal Glands.*

Ca′psulæ rena′les. See *Renal Glands.*

CA′PSULAR LI′GAMENT. (*Capsularis;* from *capsa,* a bag.) *Ligamentum capsulare.* The ligament which surrounds every moveable articulation, and contains the synovia like a bag.

CA′PSULE OF GLI′SSON. (*Capsula communis Glissonii. Vagina portæ. Vagina Glissonii.*) A strong tunic, formed of cellular texture, which accompanies the vena portæ, and its most minute ramifications, throughout the whole liver.

Ca′pulum. (From καμπτω, to bend.) A contortion of the eye-lids, or other parts.

Ca′pur. (Arab.) Camphor.

CA′PUT. (*capitis,* neut. from *capio,* to take; because from it, according to Varro, the senses take their origin.) The head, cranium, or skull. It is situated above or upon the trunk, and united to the cervical vertebræ.

It is distinguished into skull and face. On the skull are observed *vertex,* or crown; *sinciput,* or fore part; *occiput,* or hinder part; and the *temples.* The parts distinguished on the face are well known; as the forehead, nose, eyes, &c. The arteries of the head are branches of the carotids; and the veins empty themselves into the jugulars. See *Skull* and *Face.*

CA′PUT GALLINA′GINIS. *Verumontanum.* A cutaneous eminence in the urethra of men, before the neck of the bladder, somewhat like the head of a woodcock in miniature, around which the seminal ducts, and the ducts of the prostate gland, open.

Ca′put mo′rtuum. A fanciful term, much used by the old chemists, but now entirely rejected. It denoted the fixed residue of operations. As the earlier chemists did not examine these, they did not find any inconvenience in one general term to denote them: but the most slender acquaintance with modern chemistry must show, that it is utterly impracticable to denote, by one general term, all the various matters that remain fixed in certain degrees of heat.

CA′PUT OBSTI′PUM. The wry neck. Mostly a spasmodic complaint.

Ca′put pu′rgia. (A barbarous word, from *caput*, the head, and *purgo*, to purge.) Medicines which purge the head. Errhines. Masticatories.

Capyri′dion. (From *καπυρος*, burnt.) *Capyrion*. A medicated cake, much baked.

Capy′rion. See *Capyridion*.

Ca′rabe. (Persian.) Amber.

Ca′rabe fu′nerum. A name given to bitumen.

CA′RABUS. A genus of insects of the beetle kind. Two species, the chrysocephalus and ferrugineus, have been recommended for the tooth-ache. They must be pressed between the fingers, and then rubbed on the gum and tooth affected.

Caraco′smos. A name of the sour mare's milk, so much admired by the Tartars.

Caragua′ta. The common aloe of Brazil.

Cara′nna. (Spanish.) *Caragna*. *Carannæ gummi*. *Bresilis*. A concrete resinous juice, that exudes from a large tree, of which we have no particular account. It is brought from New Spain and America, in little masses, rolled up in leaves of flags; externally and internally it is of a brownish colour, variegated with irregular white streaks. When fresh, it is soft and tenacious; but becomes dry and friable by keeping. Pure caranna has an agreeable aromatic smell, especially when heated, and a bitterish slightly pungent taste. It was formerly employed as an ingredient in vulnerary balsams, strengthening, discutient, and suppurating plasters; but its scarcity has caused it to be forgotten.

Ca′ra schu′lli. (Indian.) *Frutex Indica spinosa*. An Indian shrub, like the caper-bush. A decoction of the root proves diuretic. *Ray*.

Caraway-seed. See *Carum*.

Ca′rbasus. (Καρϐασος.) Scribonius Largus uses this word for lint.

CA′RBO. (*Charbah*, Heb. burnt or dried.) Coal. In medicine and chemistry, it is commonly understood to mean charcoal, and receives its name from its mode of preparation, which is by burning pieces of light wood into a dry black coal.

Ca′rbo li′gni. Charcoal. As an external application, powdered charcoal has been recommended in the cure of gangrene, from external causes, and all descriptions of fœtid ulcers. Meat which has acquired a mawkish or even putrid smell, is found to be rendered perfectly sweet, by rubbing it with powdered charcoal. It is also used as tooth-powder.

CA′RBON. (From *carbo*, coal.) The chemical name of charcoal. It is the black residue of vegetables which have suffered a complete decomposition of their volatile principles by fire. Charcoal is black, brittle, sonorous, and light. It is placed among simple bodies, because no experiment has hitherto shown the possibility of decomposing it. It exists in the animal, vegetable, and mineral kingdom. When it is required to procure carbon in a state of great purity, it must be dried by strong ignition in a closed vessel. The diamond, when burnt in oxygen gas, forms carbonic acid, like charcoal, and is therefore considered to be of the same chemical nature.

CA′RBON, GA′SEOUS O′XIDE OF. Gaseous oxide of carbon was first described by Dr. Priestley, who mistook it for a hydro-carbonate. With the true nature of it, we have been only lately acquainted. It was first proved to be a peculiar gas, by Mr. Cruikshank, of Woolwich, who made it known to us as such, in April, 1801, through the medium of Nicholson's Journal for that month. Several additional properties of this gas were soon afterwards noticed by Desormes, Clement, and others. Gaseous oxide of carbon forms an intermediate substance between the pure hydro-carbonates and carbonic acid gas; but not being possessed of acid properties, Mr. Cruikshank has called it, conformably to the rules of the chemical nomenclature, *gaseous oxide of carbon*, for it consists of oxigen and carbon rendered gaseous by caloric.

Though the gaseous oxide of carbon has some of the properties peculiar to the common hydro-carbonates, the following characteristic properties sufficiently prove that none of those at present known are similar to it. We are, therefore, entitled to consider it as a peculiar gas.

Properties. — Gaseous oxide of carbon is lighter than common air, in the proportion of 22 to 23. When mingled with common air, and ignited, it does not explode, but burns with a lambent blue flame, and the product is carbonic acid. It is very little absorbable by water: it is void of taste and odour. A mixture of 20 parts of gaseous oxide of carbon and 8 of oxigen gas, fired over mercury by electricity, diminishes to a volume equal to about 18 or 19 parts, which is carbonic acid gas. It contains neither water nor the basis of that fluid. It is exceedingly noxious; animals die in it instantly; when breathed for a few minutes only, it produces giddiness and faintings.

Neither light, heat, nor electricity, have any effect upon it. When equal quantities of gaseous oxide of carbon and hydrogen gas are passed through a red-hot glass tube, the tube is lined with charcoal, water is formed, and an excess of hydrogen makes its escape. If a piece of iron be put into the tube, it is oxidated, but not converted into steel. Neither nitrogen gas nor sulphur have any action on it even at high temperatures. It is capable of dissolving a minute quantity of charcoal, and increases in bulk. It dissolves phosphorus, and acquires the property of burning with a yellow flame. The alkalies have no effect on this gas. It is not altered when passed with ammonia through an ignited tube. When the red oxide of mercury is heated in it, a commencement of reduction takes place. Neither sulphuric, nitric, nor nitro-muriatic acids, alter it, when passed with it through a red-hot tube. Four parts of oxigenated muriatic acid gas left with one of gaseous oxide of carbon, decompose it completely. Nitrous gas has no effect upon it. When mixed with sulphuretted hydrogen gas, and passed through a red-hot tube, sulphur is deposited, and sulphuretted hydrogen gas remains mixed with gaseous oxide of carbon.

Methods of obtaining Gaseous Oxide of Carbon.— Gaseous oxide of carbon may be obtained by a decomposition of carbonic acid at high temperatures, by means of various fixed substances which have a considerable affinity to oxigen. This may be done by exposing to a strong red heat, a mixture of carbonate of lime or barytes, and filings of iron, zinc, &c. It may also be procured by distilling a mixture of charcoal with some of the metallic oxides.

The method of obtaining the gaseous oxide of carbon in a state of purity, recommended by Mr. Cruikshank, is the following:

1. Take one part of chalk, previously exposed to a low red heat, for about ten minutes, mix it with an equal quantity of perfectly dry filings of zinc; let the mixture be introduced into a retort, and expose it to a heat gradually increased. As soon as the retort becomes of a dull red heat, gas will be disengaged in great abundance. The gas which comes over first is carbonic acid gas, but as soon as the retort becomes thoroughly ignited, pure gaseous oxide of carbon is liberated in a prodigious quantity, which may be collected in the usual manner over water.

In this process, a decomposition of the carbonic acid of the chalk takes place in its nascent state. The zinc robs the carbonic acid of part of its oxigen at a high temperature, and becomes to a certain degree oxidated. The carbonic acid, by being thus deprived of part of its oxigen, becomes converted into a new inflammable gas, which is the gaseous oxide of carbon.

Carbonaceous acid. See *Carbonic acid.*

CARBO'NAS. A carbonate. A neutral salt, formed by the union of carbonic acid with an alkaline, earthy, or metallic base. The carbonates employed in medicine are:

1. The potassæ carbonas.
2. The sodæ carbonas.
3. The creta præparata, and the testæ præparatæ, which are varieties of carbonate of lime.

When the base is imperfectly neutralized by the carbonic acid, the salt is termed a subcarbonate; of which kind are employed medicinally:

1. The potassæ subcarbonas.
2. The sodæ subcarbonas, and the sodæ subcarbonas exsiccata.
3. The ammoniæ subcarbonas, and the liquor ammoniæ subcarbonatis.
4. The plumbi subcarbonas.
5. The ferri subcarbonas.
6. The magnesiæ carbonas.

Carbo'nas ammo'niæ. See *Ammoniæ subcarbonas.*

CARBO'NAS CA'LCIS. Carbonate of lime. Several varieties of this are used in medicine: the purest and best are the creta præparata, testæ preparatæ, chelæ cancrorum, testæ ovorum, and oculi cancrorum.

Carbo'nas fe'rri. See *Ferri subcarbonas.*

Carbo'nas magne'siæ. See *Magnesiæ carbonas.*

Carbo'nas plumbi. See *Plumbi subcarbonas.*

Carbo'nas pota'ssæ. See *Potassæ carbonas.*

Carbo'nas so'dæ. See *Sodæ carbonas.*

Carbonated hydrogen gas. See *Carburetted hydrogen gas.*

CA'RBONIC ACID GAS. *Acidum Carbonicum.* Fixed air. Carbonaceous acid. Calcareous acid. Aërial acid. Carbonic acid gas is the first elastic aëriform fluid that was known after common air. We find that the antients were in some measure acquainted with it. Van Helmont called it the gas of Must, or of the vintage, or *gas sylvestre.*

We are indebted to Dr. Black of Edinburgh for the knowledge of some of the most remarkable properties of this fluid. In the year 1755 he discovered the affinity between this gas and alkalies: and Bergman, in 1772, proved that it was an acid.

Properties. — Carbonic acid gas is invisible. It extinguishes flame. It is fatal to animal life. It exerts powerful effects on living vegetables. Its taste is pungent and acid. Its energy, as an acid, is but feeble, although distinct and certain. Neither light or caloric seem to produce any distinct effect upon it, except that the latter dilates it. It unites with water slowly. These two fluids, after considerable agitation, at last combine, and form a sub-acid liquid. The colder the water, and the greater the pressure applied, the more carbonic acid gas will be absorbed. The water impregnated with it, sparkles upon agitation; it has a pungent, acidulous taste, and reddens tincture of litmus. Heat again disengages the gas from the water. This gas precipitates lime, strontia, and barytes, from their solutions in water. It is greedily attracted by all the alkalies. Its specific weight is to that of atmospheric air, as 1500 to 1000 nearly. It may be poured out of one vessel into another. It is not acted upon by oxygen, nor is it altered by any of the simple combustible bodies at common temperatures; but charcoal, iron, and some other metals are capable of decomposing it when assisted by heat; as is also phosphorus, when united to lime.

Methods of obtaining Carbonic Acid Gas.

Of all the gases, carbonic acid gas is that, perhaps, which is diffused in the greatest abundance throughout nature. It is found in three different states: — 1st, In that of gas; 2dly, In that of mixture; and 3dly, In that of combination. The various processes for obtaining it are the following.

1. Put into a common glass-bottle, or retort, a little marble, chalk, or lime-stone, and pour on it sulphuric acid, diluted with about six times its weight of water, an effervescence will ensue, and carbonic acid gas will be liberated, which those who have an opportunity may collect over mercury; but a mercurial apparatus is not absolutely necessary, since the gas may be collected over water, if it is to be used immediately when procured.

In this instance the carbonic acid is disengaged from the state of combination, and reduced to the aëriform state. The marble, lime-stone, or chalk, consists of this acid and lime; on presenting to it sulphuric acid, a decomposition takes place, the sulphuric acid has a greater affinity to the lime than the carbonic acid gas; it therefore unites to it, and forms sulphate of lime, disengaging at the same time the carbonic acid in the state of gas, at the temperature of our atmosphere.

Remark. — Carbonic acid gas may, in this manner, be disengaged from all its combinations with alkalies; by using indifferently any other dense acid, possessing a superior affinity to the alkali in the common acceptation of the word.

2. It may likewise be obtained from the same substances by the action of caloric.

For this purpose, reduce marble, or chalk, to powder; introduce it into a gun-barrel, which must be placed across a furnace; adapt a bent tube to the end of the gun-barrel, and insert it below a receiver in the pneumatic apparatus. Maintain a strong heat, till the barrel is brought to a state of ignition, and at that temperature carbonic acid gas will be liberated in abundance.

In this case, a decomposition of the marble or carbonate of lime takes place, on account of the action of caloric, which at a high temperature breaks the affinity of the carbonic acid and lime; it unites with the first, and leaves the lime behind in that state which is generally called quick-lime.

3. Carbonic acid gas may also be obtained by burning charcoal in oxygen gas.

Take a bell-glass, filled with oxygen gas, resting inverted in a bason of mercury; pass up into it some bits of new-made charcoal, with some touch-paper affixed to them; set fire to them by means of a lens collecting the sun's rays, and carbonic acid will be produced by the combustion of the charcoal.

Carbonic acid gas is often found occupying the lower parts of mines, caverns, tombs, and such other subterraneous places as contain materials for producing it. It is called choke, or chalk-damp. The grotto del Cane, near Naples, has long been famous for the quantity of carbonic acid gas produced there, which runs out at the opening like a stream of water. The quantity of carbonic acid gas generated in this cavern, is so great, that a dog, or any other animal, is immediately killed if his nose be thrust into it.

The carbonic acid, existing naturally in the state of gas, may be collected by filling bottles with water and emptying them into the atmosphere of this gas; the gas takes the place of the water, and fills the bottles, which must then be corked.

Carbonic acid gas is likewise formed during fermentation; on account of its great weight, it occupies the apparently empty space, or upper part of the vessel in which the fermenting process is going on. It may, in this case, be collected in a manner similar to that above.

Carbonic acid gas is also obtained during the reduction of metallic oxides, and during the deflagration of nitrates, with combustible bodies. This gas is much esteemed in the cure of typhus fevers, and of irritability and weakness of stomach producing vomiting. Against the former diseases it is given by administering yeast, bottled porter, and the like; and for the latter it is disengaged from the carbonated alkali by lemon juice in a draught given while effervescing.

Carbuncle. See *Anthrax.*

CARBU'NCULUS. (Dim. of *carbo,* a burning coal.) A carbuncle. *Carbo. Rubinus verus. Codesella. Erythema gangrænosum. Granatristum. Pruna. Persicus ignis* of Avicenna. An inflammatory tumour which soon becomes gangrenous. See *Anthrax.*

CARBURETTED HYDROGEN GAS. *Carbonated Hydrogen gas. Heavy inflammable Air. Hydro-carbonate.* There are two gaseous compounds of carbon and

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hydrogen in definite proportions, differing materially in specific gravity and other circumstances.

I. Light carburetted hydrogen gas has a fetid odour. It is neither absorbed nor altered by water. It is inflammable, and burns with a denser and deeper coloured flame than hydrogen gas. It is unalterable by acids or alkalies. Its specific gravity is greater than that of hydrogen gas. Its combustion with a due proportion of oxygen gas, is productive of water and carbonic acid. When passed through melted sulphur, it becomes converted into sulphuretted hydrogen gas, and charcoal is deposited. Electrization dilates it permanently to a little more than twice its original bulk: but when dried the dilatation is much less. The air thus expanded, requires a greater quantity of oxygen to decompose it, than the same quantity of gas not dilated by electricity; 100 cubic inches of pure light carburetted hydrogen gas weigh about seventeen grains.

Light carburetted hydrogen gas may be obtained from animal, vegetable, or mineral substances. Nature produces it ready formed in marshes and ditches, on the surface of putrid water, in mines, burying-places, common sewers, and in those situations where putrid animal and vegetable matters are accumulated. It is also generated in the intestinal canal of living animals.

1. Light carburetted hydrogen gas may be plentifully procured from most stagnant waters: to do this, fill a wide-mouthed bottle with the water, and keep it inverted therein with a funnel in its neck; then, with a stick, stir the mud at the bottom, just under the funnel in the bottle, so as to let the bubbles of air, which rise from the mud, enter into the bottle; when by thus stirring the mud in various places, and catching the air in the bottle, it is filled, it must be corked under water.

2. It may be also obtained during the distillation of animal and vegetable matter. For instance:

Let shavings of wood or saw-dust be put into a retort, and begin the distillation with a gentle heat, increasing it gradually till the retort becomes red hot; a great quantity of gas will be liberated, which may be caught over water. On examining this gas, it will be found to consist of carbonic acid gas and carburetted hydrogen gas. In order to obtain the latter in a state of purity, the whole must be shaken with lime-water, or with a caustic alkaline solution. The carbonic acid gas will be absorbed, and the carburetted hydrogen gas left behind in a pure tsate.

The production of the gas in this manner, is the result of a partial analysis of the wood. It proves that wood contains solid hydrogen, carbon and oxygen. When the intensity of the heat has reached a certain degree, a part of the charcoal unites with part of the oxygen, and produces carbonic acid, which, by means of caloric, is melted into the gaseous state, and forms carbonic acid gas; at the same time, a part of the hydrogen of the wood combines with another portion of carbon and caloric, and forms carburetted hydrogen gas.

Remark. — The flame of burning wood, &c. is the inflamed carburetted hydrogen gas, liberated on the application of caloric to such bodies.

3. Charcoal has been in general made use of for obtaining light carburetted hydrogen gas. For this purpose, put some moistened charcoal into an earthen retort, apply heat, and increase it till the retort becomes ignited; gas will be evolved, consisting partly of carbonic acid gas, and partly of light carburetted hydrogen gas, which may be separated as before.

In this case a decomposition of the water takes place, by means of the charcoal. The oxygen forsakes its hydrogen, and unites to part of the charcoal, at this temperature, and forms carbonic acid gas, in conjunction with caloric; the liberated hydrogen assisted by caloric, dissolves another portion of the charcoal, and forms with it light carburetted hydrogen gas: but some carbonic oxide is mixed with it.

4. Light carburetted hydrogen gas is also obtained abundantly from the distillation of pit-coal; and now very extensively used as a substitute for oil in lighting the streets of this metropolis, &c.

II. Heavy carburetted hydrogen gas was first brought into notice by a society of Dutch chemists, consisting of Deiman, Troostwyk, Bond, and Laurenburgh. They observed in this gas the particular property, that when it was combined with oxygenated muriatic acid gas, in a certain proportion, the elastic form of both fluids became destroyed, and an oil was produced; for which reason they called it *Olefiant gas.*

Properties. — Heavy carburetted hydrogen gas is not absorbed or altered by water. Its weight nearly equals that of common air. It has a disagreeable fetid odour, different from that of light carburetted hydrogen gas. It burns with a strong compact flame, similar to that of resinous oil. When mixed with oxygenated muriatic acid gas, its bulk is diminished, and an oil is formed. When the mixture of these two gases is fired, a quantity of charcoal is immediately deposited, in the form of fine soot. Sulphuric, sulphurous, nitric, and muriatic acids do not act upon it; neither does nitrous gas, nor any of the fixed alkalies. Ammonia adds to its volume without occasioning any other change. Phosphorus heated in it even to fusion, does not affect it. When made to pass through an ignited glass tube, it does not diminish in volume, but loses the property of forming oil with oxygenated muriatic acid gas. Electric shocks passed through it, dilate, and likewise deprive it of this property. When passed through a tube with sulphur in fusion, sulphuretted hydrogen gas is obtained, and charcoal deposited. When burnt with oxygen gas, or when passed through a red-hot tube, filled with oxide of manganese, carbonic acid gas is formed, as well as water.

Preparation. — Heavy carburetted hydrogen gas is obtained by decomposing alkohol by sulphuric acid, at high temperatures. It is also obtained in abundance when alkohol or ether is passed through a red-hot earthen tube. Sulphuric ether mixed with sulphuric acid, and subjected to heat, also affords it, but in a less pure state.

The Dutch chemists observed, that if the vapour of ardent spirit or ether be made to pass through a glass tube, over the component parts of the earthen tube, namely, alumine and silex, this gas was also produced; or by passing it through a red-hot tube of pipe-clay.

In order to obtain this gas the following method may serve:

Let four parts of concentrated sulphuric acid, and one of highly rectified ardent spirit, be mingled together gradually in a glass retort; heat will be developed, the mixture will become brown, and heavy carburetted hydrogen gas will be extricated without the application of external heat. When a moderate heat is applied, the action is very violent, and the gas is liberated very copiously, and may be received over water.

The gas obtained, is always mixed with a considerable quantity of sulphurous acid gas, from which it may be freed by agitating it in contact with lime-water, or a solution of potash.

Remark. — In this operation, the heat ought to be regulated with great care, and the retort holding the mixture ought to be very capacious, otherwise the matter will be forced over into the receiver. The heat of a candle, or lamp, is sufficient.

Ca′rcarus. *Carcaros.* (From καρκαιρω, to resound.) A kind of fever in which the patient has a continual horror and trembling, with an unceasing sounding in his ears.

Ca′rcas. The Barbadoes nut-tree, the Cataputia.

Ca′rcax. (From καρα, a head.) A species of poppy, with a very large head.

Ca′rcer. Paracelsus means by it, a remedy proper for restraining the disorder by motions of body and mind, as in curing the *chorea Sancti Viti.*

Carche′sius. (Καρχησιος.) A name of some bandages noticed by Galen, and described by Oribasius. Properly it is the top of a ship's mast.

CARCINO′MA. (From καρκινος, a cancer.) See *Cancer.*

Carcinos. (Καρκινος, a cancer.) See *Cancer.*

Cardama′ntica. (From καρδαμον, the nasturtium.) A species of sciatica cresses.

Cardamele′um. A medicine of no note, mentioned by Galen.

CARDAMI′NE. (From καρδια, the heart; because it acts as a cordial and strengthener, or from its having the taste of cardamum, that is, nasturtium, or cress.) Cuckoo-flower.

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.*

2. The pharmacopœial name of the common lady's smock, or cuckoo-flower. See *Cardamine pratensis.*

Cardami′ne prate′nsis. The systematic name of the plant called *cardamine* in the pharmacopœias. *Cardamine; foliis pinnatis; foliolis, radicalibus subrotundis, caulinis lanceolatis* of Linnæus. This plant is also called *Cardamantica. Nasturtium aquaticum. Culi flos. Iberis sophia.* It is the flower of this plant which has a place in the materia medica, upon the authority of Sir George Baker, who has published five cases, two of chorea Sancti Viti, one of spasmodic asthma, one of hemiplegia, and a case of spasmodic affections of the lower limbs, wherein the *flores cardamines* were supposed to have been successfully used. A variety of virtues have been given to this plant, which do not deserve the attention of practitioners.

Cardami′nes flo′res. See *Cardamine pratensis.*

CARDAMO′MUM. (From καρδαμον, and αμωμον: because it partakes of the nature, and is like both the cardamum and amomum.) The cardamom seed.

CARDAMO′MUM MA′JUS. The greater cardamom seeds, by some called grains of Paradise, are contained in a large, brown, somewhat triangular husk, the thickness of one's thumb, and pyramidal; their virtues are similar to those of the *cardamomum minus.*

CARDAMO′MUM ME′DIUM. The seeds correspond, in every respect, with the lesser, except in size, they being twice as long, but no thicker than the *cardamomum minus.*

Cardamo′mum mi′nus. See *Elettaria Cardamomum.*

Cardamo′mum pipera′tum. The grains of Paradise.

Cardamo′mum Siberie′nse. The Anisum Indicum.

Ca′rdamum. (From καρδια, the heart; because it comforts and strengthens the heart.) Garden cresses.

CA′RDIA. (From κεαρ, the heart.) This term was applied by the Greeks to the heart. The superior opening of the stomach is also so called.

CARDI′ACA. (From καρδια, the heart.)

1. Cordials. See *Cordials.*

2. The pharmacopœial name of motherwort. (So named from the supposed relief

it gives in faintings and disorders of the stomach. See *Leonurus cardiaca.*

Cardi'aca confe'ctio. See *Confectio aromatica.*

Cardi'aca pa'ssio. The cardiac passion. Antient writers frequently mention a disorder under this name, but the moderns always speak of it as a syncope.

Cabdi'acus mo'rbus. A name by which the antients called the typhus fever.

CARDIA'LGIA. (From καρδια, the cardia, and αλγος, pain.) Pain at the stomach. The heartburn. Dr. Cullen ranks it as a symptom of dyspepsia. Heartburn is an uneasy sensation in the stomach, with anxiety, a heat more or less violent, and sometimes attended with oppression, faintness, an inclination to vomit, or a plentiful discharge of clear lymph, like saliva. This pain may arise from various and different causes; such as *flatus;* from *sharp humours,* either acid, bilious, or rancid; from *worms* gnawing and vellicating the coats of the stomach; from *acrid* and *pungent food,* such as spices, aromatics, &c.; as also from *rheumatic* and *gouty humours,* or *surfeits;* from too free a use of tea, or watery fluids relaxing the stomach, &c.; *from the natural mucus* being abraded, particularly in the upper orifice of the stomach.

Cardia'lgia inflammato'ria. Inflammation in the stomach.

Cardia'lgia sputato'ria. See *Pyrosis.*

Cardime'lech. (From καρδια, the heart, and *meleck,* Heb. a governor.) A fictitious term in Dolæus's Encyclopædia, by which he would express a particular active principle in the heart, appointed to what we call the vital functions.

Cardimo'na. A name for Cardialgia.

Cardinal flowers, blue. See *Lobelia.*

Cardiname'ntum. (From *cardo,* a hinge.) A sort of articulation like a hinge.

CARDIO'GMUS. (From καρδιωσσω, to have a pain in the stomach.) The same as *Cardialgia.* Also an aneurism in the aorta, near the heart, which occasions pain in the præcordia.

Cardio'nchus. (From καρδια, the heart, and ογκος, a tumour.) An aneurism in the heart, or in the aorta near the heart.

Cardiotro'tus. (From καρδια, the heart.) and τιτρωσκω, to wound.) One who hath a wound in his heart.

CARDI'TIS. (From καρδια, the heart.) Inflammation of the heart. It is a genus of disease arranged by Cullen in the class *pyrexiæ,* and order *phlegmasiæ.* It is known by pyrexia, pain in the region of the heart, great anxiety, difficulty of breathing, cough, irregular pulse, palpitation, and fainting, and the other symptoms of inflammation.

The treatment of carditis is, in a great measure, similar to that of pneumonia. It is necessary to take blood freely, as well generally as locally, and apply a blister near the part. Purging may be carried to a greater extent than in pneumonia; and the use of digitalis is more important, to lessen the irritability of the heart. It is equally desirable to promote diaphoresis, but expectoration is not so much to be looked for, unless indeed, as very often happens, the inflammation should have extended, in some degree, to the lungs.

Ca'rdo. (A hinge.) The articulation called *Ginglymus;* also the second vertebra of the neck.

Ca'rdonet. A wild artichoke, esculent.

Cardo'nium. So Paracelsus calls wine medicated with herbs.

Cardopa'tium. The low carline thistle, said to be diaphoretic.

CA'RDUUS. (*à carere, quasi aptus carendæ lanæ,* being fit to tease wool; or from κειρω, to abrade; so named from its roughness, which abrades and tears whatever it meets with.) The thistle, or teasel. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.*

Ca'rduus aca'nthus. The bear's breech.

Ca'rduus a'ltilis. The artichoke.

Ca'rduus benedi'ctus. See *Centaurea.*

Ca'rduus hæmorrhoida'lis. (So called because it is said to relieve the pains of the hæmorrhoids, if beat into a poultice and applied.) Also called carduus vinearum repens, sonchi folio. Cirsium arvense. Ceanothos. The common creeping way thistle. *Serratula arvensis* of Linnæus.

Ca'rduus la'cteus. See *Carduus Marianus.*

Ca'rduus la'cteus Syri'acus. The Spanish milk-thistle. Stomachic and anodyne.

Ca'rduus mariæ. See *Carduus marianus.*

Ca'rduus maria'nus. The systematic name of the officinal *Carduus Mariæ.* Carduus albis maculis notatus vulgaris, C. B. Common milk-thistle, or Lady's thistle. The seeds of this plant, *Carduus marianus: foliis amplexicaulibus, hastato-pinnatifidis, spinosis; calycibus aphyllis; spinis caniliculatis, duplicato-spinosis,* of Linnæus, and the herb have been employed medicinally. The former contain a bitter oil, and are recommended as relaxants. The juice of the latter is said to be salutary in dropsies, in the dose of four ounces; and, according to Miller, to be efficacious against pungent pains.

Ca'rduus sati'vus. The artichoke.

Ca'rduus solstitia'lis. The calcitrapa officinalis.

Ca'rduus tomento'sus. The woolly thistle. See *Onopordium acanthium.*

Careba'ria. (From καρη, the head, and βαρος, weight.) A painful and uneasy heaviness of the head.

Care'num. (From καρη, the head.) Galen uses this word for the head.

Care'num vi'num. Strong wine.

Ca'reum. (From *Caria,* the country whence they were brought.) The caraway.

CA'REX. (*Carex, -icis,* fœm. from *careo,* not *quia viribus careat,* but because, from its roughness, it is fit *ad carendum,* to card, tease, or pull.) Sedge. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Triandria.*

Ca'rex arena'ria. The systematic name of the officinal *sarsaparilla Germanica,* which grows plentifully on the sea coast. The root has been found serviceable in some mucal affections of the trachea, in rheumatic pains, and gouty affections.

CA'RICA. (From *Caria,* the place where they were cultivated.) The fig. See *Ficus carica.*

Ca'rica papa'ya. Papaw-tree. This is a native of both Indies, and the Guinea coast of Africa. When the roundish fruit are nearly ripe, the inhabitants of India boil and eat them with their meat, as we do turnips. They have somewhat the flavour of a pompion. Previous to boiling, they soak them for some time in salt and water, to extract the corrosive juice, unless the meat they are to be boiled with should be very salt and old, and then this juice being in them, will make them as tender as a chicken. But they mostly pickle the long fruit, and thus they make no bad succedaneum for mango. The buds of the female flowers are gathered, and made into a sweetmeat; and the inhabitants are such good husbands of the produce of this tree, that they boil the shells of the ripe fruit into a repast, and the insides are eaten with sugar in the manner of melons. Every part of the papaw tree, except the ripe fruit, affords a milky juice, which is used, in the Isle of France, as an effectual remedy for the tape-worm. In Europe, however, whither it has been sent in the concrete state, it has not answered, perhaps from some change it had undergone, or not having been given in a sufficient dose.

Ca'ricum. (From *Caricus,* its inventor.) *Carycum.* An ointment for cleansing ulcers, composed of hellebore, lead, and cantharides.

CA'RIES. (From *carah,* Chald.) Rottenness, or mortification of the bones.

Cari'ma. The cassada bread.

Cari'na. A name formerly applied to the back-bone.

Ca'rium te'rra. Lime.

Carivilla'ndi. A name of sarsaparilla root.

CARLI'NA. (From *Carolus,* Charles the Great, or Charlemagne; because it was believed that an angel showed it to him, and that, by the use of it, his army was preserved from the plague.) Carline thistle. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.* The officinal name of two kinds of plants.

Carli'na acau'lis. The systematic name of the *chamæleon album.* *Carlina.* *Cardopatium.* Carline thistle. *Carlina acaulis; caule unifloro, flore breviore* of Linnæus. The root of this plant is bitter, and said to possess diaphoretic and anthelmintic virtues. It is also extolled by foreign physicians in the cure of acute, malignant, and chronic disorders.

Carli'na gummi'fera. *Carduus pinea.* *Ixine.* Pine thistle. This plant is the *Atractylis gummifera* of Linnæus. The root, when wounded, yields a milky, viscous juice, which concretes into tenacious masses, at first whitish, resembling wax, when much handled growing black; it is said to be chewed with the same views as mastich.

Carline thistle. See *Carlina acaulis.*

Ca'rlo Sa'ncto ra'dix. St. Charles's root; so called by the Spaniards, on account of its great virtues. It is found in Mechoachan, a province in America. Its bark hath an aromatic flavour, with a bitter acrid taste. The root itself consists of slender fibres. The bark is sudorific, and strengthens the gums and stomach.

CA'RMEN. (*Carmen, -inis,* neut. A verse; because charms usually consisted of a verse.) A charm; an amulet.

Carmes. (The Carmelite friars, Fr.) Carmelite water; so named from its inventors; composed of baum, lemon-peel, &c.

Carmina'ntia. See *Carminatives.*

CARMI'NATIVES. (*Carminativa,* sc. *medicamenta:* from *carmen,* a verse or charm; because practitioners, in antient times, ascribed their operation to a charm or enchantment.) A term applied to those substances which allay pain, and dispel flatulencies of the primæ viæ. The principal carminatives are the semina cardamomi, anisi et carui; olea essentialia carui, anisi et juniperi; confectio aromatica; pulvis aromaticus; tinctura cardamomi; tinctura cinnamoni composita; zinziber; tonics, bitters, and astringents.

Carnaba'dium. Caraway-seed.

CA'RNEÆ COLU'MNÆ. The fleshy pillars or columns in the cavities of the heart. See *Heart.*

Carni'cula. (Dim. of *caro, carnis,* the flesh.) The fleshy substance which surrounds the gums.

Carnifo'rmis. (From *caro,* flesh, and *forma,* likeness.) Having the appearance of flesh. It is commonly applied to an abscess where the flesh surrounding the orifice is hardened, and of a firm consistence.

CA'RO. (*Caro, carnis,* fœm.) Flesh. The red part or belly of a muscle; also the pulp of fruit.

Ca'ro adna'ta. The recent swelled testicle.

Caroli'na. See *Carlina.*

Caro'pi. The amomum verum.

Caro'ra. The name of a vessel that resembles an urinal.

Caro'sis. See *Carus.*

Caro′ta. See *Daucus.*

Carotide′æ arte′riæ. See *Carotid artery.*

CAROTID ARTERY. (From καροω, to cause to sleep; so called because, if tied with a ligature, they cause the animals to be comatose, and have the appearance of being asleep.) The carotids are two considerable arteries that proceed, one on each side of the cervical vertebræ, to the head, to supply it with blood. The right carotid does not arise immediately from the arch of the aorta, but is given off from the arteria innominata. The left arises from the arch of the aorta. Each carotid is divided into external and internal, or that portion without and that within the cranium. The external gives off eight branches to the neck and face, viz. *anteriorly*, the superior thyroideal, the sublingual, the inferior maxillary, the external maxillary; *posteriorly*, the internal maxillary, the occipital, the external auditory, and the temporal. The internal carotid or cerebral artery, gives off four branches within the cavity of the cranium; the anterior cerebral, the posterior, the central artery of the optic nerve, and the internal orbital.

Caro′um. The caraway seed.

Ca′rpasus. (So named ϖαρα το καρον ϖοιησαι: because it makes the person who eats it appear as if he was asleep.) A herb, the juice of which was formerly called opocarpason, opocarpathon, or opocalpason; according to Galen it resembles myrrh; but is esteemed highly poisonous.

Carpa′thicum balsamum. See *Pinus Cembra.*

Carpenta′ria. (From *carpentarius*, a carpenter; and so named from its virtues in healing cuts and wounds made by a tool.) A vulnerary herb; but not properly known what it is.

Carpha′leus. (From καρφω, to exsiccate.) Hippocrates uses this word to mean *dry*, opposed to *moist.*

Carpholo′gia. (From καρφος, the nap of clothes, and λεγω, to pluck.) A delirious picking of the bed-clothes, a symptom occurring in dangerous fevers.

Ca′rphus. (From καρφη, a straw.) In Hippocrates it signifies a mote, or any small substance. A pustule of the smallest kind. Also the herb fenugreek.

Ca′rpia. (From *carpo*, to pluck, as lint is made from linen cloth.) Lint. See *Linteum.*

Carpi′smus. The wrist.

CARPOBA′LSAMUM. (From καρπος, fruit, and βαλσαμον, balsam.) See *Amyris Gileadensis.*

Carpolo′gia. See *Carphologia.*

CA′RPUS. (Καρπος, the wrist.) The wrist, or carpus. It is situated between the fore-arm and hand. See *Bone.*

Carrot. See *Daucus.*

Carrot, candy. See *Athamanta Cretensis.*

Carrot poultice. See *Cataplasma dauci.*

CA′RTHAMUS. (From καθαιρω, to purge.) 1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.*

2. The pharmacopœial name of the saffron flower. See *Carthamus tinctorius.*

Ca′rthamus tincto′rius. The systematic name of the saffron flower. *Carthamus; foliis ovatis, integris, serrato-aculeatis* of Linnæus: called also *Cnicus, Crocus Saracenicus, Carthamum officinarum, Carduus sativus.* The plant is cultivated in many places on account of its flowers, which are used as a yellow dye. The seeds, freed from their shells, have been celebrated as a gentle cathartic, in the dose of one or two drachms. They are also supposed to be diuretic and expectorant; particularly useful in humoral asthma, and similar complaints. The *carthamus lanatus* is considered in France as a febrifuge and sudorific. The dried flowers are frequently mixed with saffron, to adulterate it.

CARTHEUSER, John Frederick, a professor of medicine at Francfort on the Oder, acquired considerable reputation about the middle of the last century, by several luminous works on botany and pharmacy; especially his "Rudimenta Materiæ Medicæ Rationalis," and "De Genericis quibusdam Plantarum Principiis." He had two sons, Frederick Augustus and William, also of the medical profession, and authors of some less important works.

Carthusia′nus. (From the Monks of that order, who first invented it.) A name of the precipitated sulphur of antimony.

CA′RTILAGE. (*Cartilago, -inis.* fœm. Quasi *carnilago;* from *caro, carnis,* flesh.) A white elastic, glistening substance, growing to bones, and commonly called *gristle.* Cartilages are divided, by anatomists, into *obducent*, which cover the moveable articulations of bones; *inter-articular*, which are situated between the articulations, and *uniting* cartilages, which unite one bone with another. Their use is to facilitate the motions of bones, or to connect them together.

CARTILA′GO ANNULA′RIS. See *Cartilago cricoidea.*

CARTILA′GO ARYTÆNOIDE′A. See *Larynx.*

CARTILA′GO CRICOIDE′A. The cricoid cartilage belongs to the larynx, and is situated between the thyroid and arytenoid cartilages and the trachea; it constitutes, as it were, the basis of the many annular cartilages of the trachea.

CARTILA′GO ENSIFORMIS. *Cartilago xiphoidea.* Ensiform cartilage. A cartilage shaped somewhat like a sword or dagger, attached to the lowermost part of the sternum, just at the pit of the stomach.

Cartila′go scutifo′rmis. See *Thyroid cartilage.*

Cartila′go thyroide′a. See *Thyroid cartilage.*

Cartila′go xiphoide′a. See *Cartilago ensiformis.*

CA′RUI. (*Caruia*, Arabian.) The caraway. See *Carum.*

CA′RUM. (Καρος: so named from *Caria*, a province of Asia.) The caraway.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the caraway plant. See *Carum carui.*

Ca′rum ca′rui. The systematic name for the plant whose seeds are called caraways. It is also called *Carvi. Cuminum pratense. Carus. Caruon.* The *Carum carui* of Linnæus. The seeds are well known to have a pleasant spicy smell, and a warm aromatic taste; and, on this account, are used for various economical purposes. They are esteemed to be carminative, cordial, and stomachic, and recommended in dyspepsia, flatulencies, and other symptoms attending hysterical, and hypocondriacal disorders. An essential oil and distilled water are directed to be prepared from them by the London college.

CA′RUNCLE. *Caruncula.* (Diminutive of *caro*, flesh.) A little fleshy excrescence; as the carunculæ myrtiformes, carunculæ lachrymales, &c.

CARU′NCULA LACHRYMA′LIS. A long conoidal gland, red externally, situated in the internal canthus of each eye, before the union of the eyelids. It appears to be formed of numerous sebaceous glands, from which many small hairs grow. The hardened smegma observable in this part of the eye in the morning, is separated by this caruncle.

Caru′nculæ cuticula′res alæ. The nymphæ.

Caru′nculæ mamilla′res. The extremities of the tubes in the nipple.

CARU′NCULÆ MYRTIFO′RMES. When the hymen has been lacerated by attrition, there remain in its place, two, three, or four caruncles, which have received the name of myrtiform.

Caru′nculæ papilla′res. The protuberances within the pelvis of the kidney, formed by the papillous substance of the kidney.

Carunculo′sa ischu′ria. A suppression of urine, from caruncles in the urethra.

Ca′ruon. See *Carum.*

Ca′rus. (Καρος: from *καρα*, the head, as being the part affected.) *Caros. Carosis.*

1. Insensibility and sleepiness, as in apoplexy, but attended with quiet respiration.

2. A profound sleep, without fever. A lethargy.

3. The caraway-seed.

Ca′rva. The cassia lignea.

Carye′don. (From *καρυα*, a nut.) *Carydon.* A sort of fracture, where the bone is broken into small pieces, like the shell of a cracked nut.

Cary′don. See *Caryedon.*

Caryocosti′num. An electuary, named from two of its ingredients, the clove and costus.

CARYOPHYLLA′TA. (From *καρυοφυλλον*, the caryophyllus; so named because it smells like the caryophyllus, or clove July flower.) See *Geum urbanum.*

Caryophylloi′des co′rtex. See *Laurus Culilawan.*

CARYOPHY′LLUM. (Καρυοφυλλον: from *καρυον*, a nut, and *φυλλον*, a leaf; so named because it was supposed to be the leaf of the Indian nut.) The clove.

CARYOPHY′LLUM AROMA′TICUM. The same. See *Eugenia Caryophyllata.*

Caryophy′llum ru′brum. The clove pink. See *Dianthus caryophyllus.*

CARYOPHY′LLUS. The clove-tree. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.* See *Eugenia Carophyllata.*

Caryophy′llus aroma′ticus America′nus. The piper Jamaicencis.

Caryophy′llus horte′nsis. The caryophyllum rubrum.

Caryophy′llus vulga′ris. The caryophyllata.

Caryo′tis. (From *καρυον*, a nut.) *Caryota.* Galen uses this word to mean a superior sort of dates, of the shape of a nut.

CASCARI′LLA. (Dim. of *cascara*, the bark, or shell. Span.) A name given originally to small specimens of cinchona: but now applied to the bark of the *Croton cascarilla*; which see.

Ca′schu. See *Acacia Catechu.*

Cashew-nut. See *Anacardium occidentale.*

Cashoo. An aromatic drug of Hindostan, said to possess pectoral virtues.

Ca′sia. See *Cassia.*

Casmina′ris. The cassumuniar of Bengal.

Ca′ssa. (Arab.) The thorax or breast.

Cassa′da. *Cassava.* See *Jatropha Manihot.*

Ca′ssamum. The fruit of the balsam tree.

CASSEBOHM, Frederic, a professor of anatomy at Halle in Saxony, published in 1730, a treatise on the difference between the Fœtus and Adult, in which he notices the descent of the testicle from the abdomen; and four years after a very minute and exact description of the ear. He likewise explained in subsequent publications the manner of dissecting the muscles and the viscera: but an early death prevented his completing his design of elucidating the anatomy of the whole body in the same way.

CASSERIUS, Julius, was born of humble parents at Placentia in 1545. He became servant to Fabricius at Padua, who observing his talent, first taught him anatomy, then made him his assistant, and finally coadjutor in the professorship in 1609. He pursued the study with uncommon zeal, expending almost all his profits in procuring subjects, and in having drawings and prints made of the parts, which he discovered, or traced more accurately than his predecessors. He employed comparative anatomy, not as a substitute for, but only as a clue to that of the human subject. He published an account of the organs of voice and hearing, which he afterwards extended to the other senses explaining also the uses of these parts. Some years after his death in 1616, the rest of his plates, amounting to 78, with the explanations, were published with the works of Spigelius.

CA′SSIA. (From the Arabic *katsia*, which is from *katsa*, to tear off; so called from the act of stripping the bark from the tree.) The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Monogynia*. Cassia and Senna belong to this genus.

Ca′ssia Caryophylla′ta. The clove-bark tree. See *Myrtus Caryophyllata*.

Ca′ssia fi′stula. *Cassia nigra. Cassia fistularis. Alexandrina. Chaiarxambar. Canna. Cassia solutiva. Tlai Xiem.* Purging cassia. This tree, *Cassia fistula; foliis quinquejugis ovatis acuminatis glabris, petiolis eglandulatis* of Linnæus, is a native of both Indies. The pods of the East India cassia are of a less diameter, smoother, and afford a blacker, sweeter, and more grateful pulp, than those which are brought from the West Indies. Those pods which are the heaviest, and in which the seeds do not rattle on being shaken, are commonly the best, and contain the most pulp, which is the part medicinally employed, and to be obtained in the manner described in the pharmacopœias. The best pulp is of a bright shining black colour, and of a sweet taste, with a slight degree of acidity. It has been long used as a laxative medicine, and being gentle in its operation, and seldom disturbing the bowels, is well adapted to children, and to delicate or pregnant women. Adults, however, find it of little effect, unless taken in a very large dose, as an ounce or more; and, therefore, to them this pulp is rarely given, but usually conjoined with some of the brisker purgatives. The officinal preparation of this drug, is the confectio cassiæ; it is also an ingredient in the confectio sennæ.

Ca′ssia fistula′ris. See *Cassia fistula*.

Ca′ssia li′gnea. Cassia bark. See *Laurus cassia*.

Ca′ssia ni′gra. See *Cassia fistula*.

Cassia, purging. See *Cassia fistula*.

Ca′ssia senna. The systematic name of the plant, which affords senna. *Senna alexandrina. Senna italica.* Senna, or Egyptian cassia. *Cassia; foliis sejugis subovatis, petiolis eglandulatis* of Linnæus. The leaves of senna, which are imported here from Alexandria for medicinal use, have a rather disagreeable smell, and a subacrid, bitterish, nauseous taste. They are in common use as a purgative. The formulæ given of the senna by the colleges, are an infusion, a compound powder, a tincture, and an electuary. See *Infusum sennæ*, &c.

Ca′ssia soluti′va. See *Cassia fistula*.

Ca′ssiæ arame′ntum. The pulp of cassia.

Ca′ssiæ flo′res. What are called cassia flowers in the shops, are the flowers of the true cinnamon tree, *Laurus cinnamomum* of Linnæus. They possess aromatic and astringent virtues, and may be successfully employed in decoctions, &c. in all cases where cinnamon is recommended. See *Laurus cinnamomum*.

Ca′ssiæ pu′lpa. See *Cassia fistula*.

Ca′ssob. An obsolete term for kali.

Cassole′ta. Warm fumigations described by Marcellus.

Cassonada. Sugar.

Cassummu′niar. (Of uncertain derivation, perhaps Indian.) *Casamunar. Casmina. Risagon. Bengale Indorum.* The root, occasionally exhibited under one of these names, is brought from the East Indies. It comes over in irregular slices of various forms, some cut transversely, others longitudinally. The cortical part is marked with circles of a dusky brown colour: the internal part is paler, and unequally yellow. It possesses moderately warm, bitter, and aromatic qualities, and a smell like ginger. It is recommended in hysterical, epileptic, and paralytic affections.

CASTA′NEA. (*καϛανον*: from *Castana*, a city in Thessaly, whence they were brought.) The common chesnut. See *Fagus castanea*.

Casta′nea equi′na. The horse-chesnut. See *Æsculus Hippocastanum*.

Castánea flóre álbo. Coffee.

CASTELLANUS, Peter, or Du Chatel, was born at Grammont in Flanders, 1585. His rapid improvement in the Greek language procured him the professorship, at Lovain, in 1609; but he did not graduate in medicine till nine years after. At the same period, he published the lives of eminent physicians in Latin, written in a concise but very entertaining manner, with useful references to the original authorities. He died in 1632.

CASTELLUS, Bartholomew, an Italian physician, who practised at Messina about the end of the 16th century. He was author of two works, both for a long time extremely popular, a Synopsis of Medicine, and "Lexicon Medicum Græco-Latinum," in which great learning and judgment are conspicuous.

Castle-leod waters. A sulphureous

spring in Ross-shire, celebrated for the cure of cutaneous diseases and foul ulcers.

Ca′stor fi′ber. The systematic name of the beaver. See *Castoreum.*

Castor. See *Castoreum.*

Castor oil. See *Ricinus.*

Castor, Russian. See *Castoreum.*

CASTORE′UM. (*Castor* from καϛωρ, the beaver, *quasi* γαϛωρ: from γαϛηρ, the belly: because of the largeness of its belly; or *à castrando,* because he was said to castrate himself in order to escape the hunters.) *Castoreum russicum.* A peculiar concrete substance, called castor, is obtained from the *Castor fiber* of Linnæus, or beaver, an amphibious quadruped inhabiting some parts of Prussia, Russia, Germany, &c.; but the greatest number of these animals is met with in Canada. The name of *castoreum* or castor is given to two bags, situated in the inguinal regions of the beaver, which contain a very odorous substance, soft, and almost fluid when recently cut from the animal, but which dries, and assumes a resinous consistence in process of time. The best comes from Russia. This substance has an acrid, bitter, and nauseous taste; its smell is strong and aromatic, yet at the same time fœtid. It is used medicinally, as a powerful antispasmodic in hysterica and hypochondriacal affections, and in convulsions, in doses of from 10 to 30 grains. It has also been successfully administered in epilepsy and tetanus. It is occasionally adulterated with dried blood, gum-ammoniacum, or galbanum, mixed with a little o the powder of castor, and some quantity of the fat of the beaver.

Castori′um. See *Castoreum.*

CASTRATION. *Celotomia. Orchotomia.* A chirurgical operation, by which a testicle is removed from the body.

Castre′nsis. (From *castra,* a camp.) A name applied to those diseases with which soldiers, encamped in marshy places, are afflicted.

Cata′basis. (From καταϐαινω, to descend.) A descent or operation downwards.

Catabi′basis. (From καταϐιϐαζω, to cause to descend.) An exclusion, or expulsion of the humours downwards.

Catablaceu′sis. (From καταϐλακευω, to be useless.) Hippocrates uses this word to signify carelessness and negligence in the attendance on and administration to the sick.

Catable′ma. (From καταϐαλλω, to throw round.) The outermost fillet, which secures the rest of the bandages.

Catabronche′sis. (From κατα, and βρογχος, the throat; or καταϐρογχιζω, to swallow.) The act of swallowing.

Catacau′ma. (From κατακαιω, to burn.) A burn or scald.

Catacau′sis. (From κατακαιω, to burn.) The act of combustion, or burning.

Catacecli′menus. (From κατακλινομαι, to lie down.) Keeping the bed, from the violence of a disease.

Catacecra′menus. (From κατακεραννομι, to reduce to small particles.) Broken into small pieces. It is used of fractures.

Catacera′stica. (From κατακεραννυμι, to mix together.) Medicines which obtund the acrimony of humours, by mixing with them and reducing them.

Catachlide′sis. (From καταχλιδαω, to indulge in delicacies.) A gluttonous indulgence in sloth and delicacies, to the generation of diseases.

Catachri′ston. (From καταχριω, to anoint.) An unguent, or ointment.

Catachri′sma. An ointment.

Cata′clasis. (From κατακλαω, to break, or distort.) Distorted eyelids.

Ca′tacleis. *Catacleïs.* (From κατα, beneath, and κλεις, the clavicle.) The subclavicle, or first rib, which is placed immediately under the clavicle.

Catacli′nes. (From κατακλινω, to lie down.) One who, by disease, is fixed to his bed.

Cata′clisis. (From κατακλινω, to lie down.) A lying down. It means also incurvation.

Catacly′sma. (From κατακλυζω, to wash.) A clyster.

Catacly′smus. (From κατακλυζω, to wash.) An embrocation. A dashing of water upon any part.

Catacre′mnos. (From κατα, and κρημνος, a precipice.) Hippocrates means, by this word, a swoln and inflamed throat, from the exuberance of the parts.

Catacru′sis. (From κατακρουω, to drive back.) A revulsion of humours.

Catadoule′sis. (From καταδουλοω, to enslave.) The subduing of passions, as in a phrensy, or fever.

Catægize′sis. (From καταιγιζω, to repel.) A revulsion or rushing back of humours, or wind in the intestines.

Catæone′sis. (From καταιονεω, to irrigate.) Irrigation by a plentiful affusion of liquor on some part of the body.

Cata′gma. (From κατα, and αγω, to break.) A fracture. Galen says a solution of the bone is called catagma, and elcos is a solution of the continuity of the flesh: that when it happens to a cartilage, it has no name, though Hippocrates calls it catagma.

Catagma′tica. (From καταγμα, a fracture.) Catagmatics. Remedies proper for cementing broken bones, or to promote a callus.

Catago′ge. (From καταγομαι, to abide.) The seat or region of a disease or part.

Catagyio′sis. (From καταγυιοω, to debilitate.) An imbecility and enervation of the strength and limbs.

CATALE′PSIS. (From καταλαμϐανω, to seize, to hold.) *Catoche. Catochus. Congelatio. Detentio. Encatalepsis;* and by Hippocrates *aphonia;* by Antigenes *anaudia;* by Cælius Aurelianus *apprehensio, oppressio; comprehensio. Apoplexia cataleptica* of Cullen. Catalepsy. A sudden suppression of motion and sensation, the body remaining in the same posture that it was in when seized.

Dr. Cullen says, he has never seen the catalepsy except when counterfeited; and is of opinion, that many of those cases related by other authors, have also been counterfeited. It is said to come on suddenly, being only preceded by some languor of body and mind, and to return by paroxysms. The patients are said to be for some minutes, sometimes (though rarely) for some hours, deprived of their senses, and all power of voluntary motion; but constantly retaining the position in which they were first seized, whether lying or sitting; and if the limbs be put into any other posture during the fit, they will keep the posture in which they are placed. When they recover from the paroxysm, they remember nothing of what passed during the time of it, but are like persons awakened out of a sleep.

Catalo′tica. (From *καταλοαω*, to grind down.) Medicines to soften and make smooth the rough edges and crust of cicatrices.

Cata′lysis. (Καταλυσις: from *καταλυω*, to dissolve or destroy.) It signifies a palsy, or such a resolution as happens before the death of the patient; also that dissolution which constitutes death.

Catamara′smus. (From *καταμαραινω*, to grow thin.) An emaciation, or resolution of tumours.

Catamasse′sis. (From *καταμασσομαι*, to manducate.) The grinding of the teeth, and biting of the tongue; so common in epileptic persons.

CATAME′NIA. (*Catamenia, -orum*, neut. plur. from *κατα*, according to, and *μην*, the month.) *Menses.* The monthly discharge from the uterus of females, between the ages of 14 and 45. Many have questioned whether this discharge arose from a mere rupture of vessels, or whether it was owing to a secretory action. There can be little doubt of the truth of the latter. The secretory organ is composed of the arterial vessels situated in the fundus of the uterus. The dissection of women, who have died during the time of their menstruating, proves this. Sometimes, though very rarely, women, during pregnancy, menstruate; and when this happens, the discharge takes place from the arterial vessels of the vagina. During pregnancy and lactation, when the person is in good health, the catamenia, for the most part, cease to flow. The quantity a female menstruates at each time, is very various; depending on climate, and a variety of other circumstances. It is commonly in England, from five to six ounces; it rarely exceeds eight. Its duration is from three to four, and sometimes, though rarely, five days. With respect to the nature of the discharge, it differs very much from pure blood; it never coagulates, but is sometimes grumous, and membranes like the decidua are formed in difficult menstruations: in some women it always smells rank and peculiar; in others it is inodorous. The use of this monthly secretion is to render the uterus fit for the conception and nutrition of the fœtus; therefore girls rarely conceive before the catamenia appear, and women rarely after their entire cessation; but very easily soon after menstruation.

Catana′nce. Succory.

Catani′phthis. (From *κατανιπτω*, to wash.) Washed, or scoured. It is used by Hippocrates of a diarrhœa washed and cleansed by boiled milk.

Catantle′ma. (From *καταντλαω*, to pour upon.) A lotion by infusion of water, or medicated fluids.

Catantle′sis. A medicated fluid.

Catapa′sma. (From *καταπασσω*, to sprinkle.) *Catapastum. Conspersio. Epipaston. Pasma. Sympasma. Aspersio. Aspergo.* The antient Greek physicians meant by this, any dry medicine reduced to powder, to be sprinkled on the body. Their various uses may be seen in Paul of Egina, lib. vii. cap. xiii.

Catapau′sis. (From *καταπαυω*, to rest, or cease.) That rest or cessation from pain which proceeds from the resolution of uneasy tumours.

Catape′ltes. (From *κατα*, against, and *πελτη*, a shield.) This word means a sling, a granado, or battery; and is also used to signify the medicine which heals the wounds and bruises made by such an instrument.

Cata′phora. (From *καταφερω*, to make sleepy.) *Coma somnolentum.* A preternatural propensity to sleep. A mild apoplexy.

Cata′phora arthri′tica. Apoplexy from gout.

Cata′phora co′ma. Sanguineous apoplexy.

Cata′phora exanthema′tica. A lethargy in eruptive diseases.

Cata′phora hydrocepha′lica. Serous apoplexy.

Cata′phora scorbu′tica. Apoplectic symptoms in scurvy.

Cata′phora ti′mor. A lethargic disposition.

Cataphra′cta. (From *καταφρασσω*, to fortify.) A bandage on the thorax.

CATAPLA′SMA. (*-matis*, neut. from *καταπλασσω*, to spread like a plaster.) A poultice. The following are among the most useful.

Catapla′sma alu′minis. This application was formerly used to inflammation of the eyes, which was kept up from weakness of the vessels; it is now seldom used, a solution of alum being mostly substituted.

Catapla′sma aceto′sæ. Sorrel poultice; ℞. Acetosæ, ℔j. To be beaten in a mortar into a pulp. A good application to scorbutic ulcers.

Catapla′sma aëra′tum. See *Cataplasma fermenti.*

Catapla′sma coni′i. Hemlock poultice.

℞. Conii foliorum exsiccatorum ℥j. Aquæ fontanæ, ℔jj. To be boiled till only a pint remains, when as much linseed-meal as necessary is to be added. This is an excellent application to many cancerous and scrophulous ulcers, and other malignant ones; frequently producing great diminution of the pain of such diseases, and improving their appearance. Justamond preferred the fresh herb bruised.

Catapla′sma cumi′ni. Take of cumin seeds, one pound; bay berries, the leaves of water germander dried, Virginia snakeroot, of each three ounces; cloves, one ounce; with honey equal to thrice the weight of the powder formed, of these make a cataplasm. It was formerly called Theriaca Londinensis. This is a warm and stimulating poultice, and was formerly much used as an irritating antiseptic application to gangrenous ulcers, and the like. It is now seldom ordered.

Catapla′sma dau′ci. Carrot poultice. ℞. Radicis dauci recentis, ℔j. Bruise it in a mortar into a pulp. Some, perhaps with reason, recommend the carrots to be first boiled. The carrot poultice is employed as an application to ulcerated cancers, scrophulous sores of an irritable kind, and various inveterate malignant ulcers.

Catapla′sma ferme′nti. Yest cataplasm. Take of flour a pound; yest half a pint. Mix and expose to a gentle heat, until the mixture begins to rise. This is a celebrated application in cases of sloughing and mortification.

Catapla′sma fu′ci. This is prepared by bruising a quantity of the marine plant, commonly called sea-tang, which is afterwards to be applied by way of a poultice. Its chief use is in cases of scrophula, white swellings, and glandular tumours more especially. When this vegetable cannot be obtained in its recent state, a common poultice of sea-water and oatmeal has been substituted by the late Mr. Hunter, and other surgeons of eminence.

Catapla′sma li′ni. Linseed poultice. ℞. Farinæ lini, ℔ss. Aquæ ferventis, ℔jss. The powder is to be gradually sprinkled into the water, while they are quickly blended together with a spoon. This is the best and most convenient of all emollient poultices for common cases, and has, in a great measure, superseded the bread and milk one, so much in use formerly.

Catapla′sma plu′mbi aceta′tis. ℞. Liquoris plumbi acetatis ʒj. Aquæ distill. ℔j. Micæ panis, q. s. Misce. Practitioners, who place much confidence in the virtues of lead, often use this poultice in cases of inflammation.

Catapla′sma sina′peos. See *Cataplasma sinapis.*

Catapla′sma sina′pis. Mustard cataplasm. Take of mustard-seed, linseed, of each powdered half a pound; boiling vinegar, as much as is sufficient. Mix until it acquires the consistence of a cataplasm.

Catapl͏e′xis. (From *κατα* and *πλησσω*, to strike.) Any sudden stupefaction, or deprivation of sensation, in any of the members, or organs.

Catapo′sis. (From *καταπινω*, to swallow down.) According to Aretæus, it signifies the instruments of deglutition. Hence also catapotium.

Catapo′tium. (Καταποτιον.) A pill.

Catapsy′xis. (From ψυχω, to refrigerate.) A refrigeration without shivering, either universal, or of some particular part. A chilliness, or, as Vogel defines it, an uneasy sense of cold in a muscular or cutaneous part.

Catapto′sis. (From *καταπιπτω*, to fall down.) It implies such a falling down as happens in apoplexies; or the spontaneous falling down of a paralytic limb.

Catapu′tia. (From *καλαπυθω*, to have an ill savour; or from the Italian, *cacapuzza*, which has the same meaning; so named from its fœtid smell.) Spurge.

Catapu′tia ma′jor. See *Ricinus.*

Catapu′tia mi′nor. See *Euphorbia Lathyris.*

CA′TARACT. (*Cataracta;* from *καταρασσω*, to confound or disturb; because the sense of vision is confounded, if not destroyed.) A disease of the eye. The *Caligo lentis* of Cullen. Hippocrates calls it *γλαυκωμα*. Galen, *υποχυμα*. The Arabians, *gutta opacu*. Celsus, *suffusio*. It is a species of blindness, arising almost always from an opacity of the crystalline lens, or its capsule, preventing the rays of light passing to the optic nerve. It commonly begins with a dimness of sight; and this generally continues a considerable time before any opacity can be observed in the lens. As the disease advances, the opacity becomes sensible, and the patient imagines there are particles of dust, or motes, upon the eye, or in the air, which are called *muscæ volitantes*. This opacity gradually increases, till the person either becomes entirely blind, or can merely distinguish light from darkness. The disease commonly comes on rapidly, though sometimes its progress is slow and gradual. From a transparent state, it changes to a perfectly white, or light grey colour. In some very rare instances, a black cataract is found. The consistence also varies, being at one time hard, at another entirely dissolved. When the opaque lens is either more indurated than in the natural state, or retains a tolerable degree of firmness, the case is termed a *firm* or hard cataract. When the substance of the lens seems to be converted into a whitish or other kind of fluid, lodged in the capsule, the case is denominated a *milky* or *fluid cataract*. When the substance is of a middling consistence, neither hard nor fluid, but about as consistent as a thick jelly, or curds, the case is named a *soft* or caseous cataract.

When the anterior or posterior layer of the crystalline capsule becomes opaque, after the lens itself has been removed from this little membranous sac, by a previous operation, the affection is named a *secondary membranous cataract.* There are many other distinctions made by authors. Cataract is seldom attended with pain; sometimes, however, every exposure to light creates uneasiness, owing probably to the inflammation at the bottom of the eye. The real cause of cataract is not yet well understood. Numbers of authors consider it as proceeding from a preternatural contraction of the vessels of the lens, arising from some external violence, though more commonly from some internal and occult cause. The cataract is distinguished from gutta serena, by the pupils in the latter being never affected with light, and from no opacity being observed in the lens. It is distinguished from hypopyon, staphyloma, or any other disease in the fore-part of the eye, by the evident marks which these affections produce, as well as by the pain attending their beginning. But it is difficult to determine when the opacity is in the lens, or in its capsule. If the retina (which is an expansion of the optic nerve in the inside of the eye) be not diseased, vision may, in most cases, be restored, by either depressing the diseased lens, which is termed couching, or extracting it.

Catarrheu'ma. (From *καταρρεω*, to flow from.) A catarrh, or defluxion of humours.

Catarrhe'xis. (From *καταρρηγνυω*, to burst out.) A violent and copious eruption or effusion; joined with *κοιλιας*, it is a copious evacuation from the belly, and sometimes alone it is of the same signification. In Vogel's Nosology, it is defined, a discharge of pure blood from the intestines, such as takes place in dysentery.

Catarrhœcus. (From *καταρρεω*, to flow from.) A word applied to diseases proceeding from a discharge of phlegm.

Cata'rropa phy'mata. (*Καταρροπα φυματα.*) Tubercles tending downward; or, as Galen states, those that have their apex on a depending part.

Cata'rrhopos nou'sos. (*Καταρροπος νουσος.*) A remission of the disease, or its decline, opposed to the paroxysm.

CATA'RRHUS. (From *καταρρεω*, to flow down.) *Coryza.* A catarrh. An increased secretion of mucus from the membranes of the nose, fauces, and bronchia, with fever, and attended with sneezing, cough, thirst, lassitude, and want of appetite. It is a genus of disease in the class *pyrexiæ,* and order *profluvia,* of Cullen. There are two species of catarrh, viz. *catarrhus à frigore,* which is very common, and is called a cold in the head; and *catarrhus à contagio,* the influenza, or epidemic catarrh, which sometimes seizes a whole city. Catarrh is also symptomatic of several other diseases. Hence we have the *catarrhus rubeolosus; tussis variolosa, verminosa, calculosa, phthisica, hysterica, à dentitione, gravidarum, metallicolarum,* &c.

Catarrh is seldom fatal, except in scrophulous habits by laying the foundation of phthisis; or where it is aggravated by improper treatment, or repeated exposure to cold, into some degree of peripneumony; when there is hazard of the patient, particularly if advanced in life, being suffocated by the copious effusion of viscid matter into the air-passages. The epidemic is generally, but not invariably, more severe than the common form of the disease. The latter is usually left to subside spontaneously, which will commonly happen in a few days, by observing the antiphlogistic regimen. If there should be fixed pain of the chest, with any hardness of the pulse, a little blood may be taken from the arm, or topically, followed by a blister: the bowels must be kept regular, and diaphoretics exhibited, with demulcents and mild opiates to quiet the cough. Where the disease hangs about the patient in a chronic form, gentle tonics and expectorants are required, as myrrh, squill, &c. In the epidemic catarrh more active evacuations are often required, the lungs being more seriously affected; but though these should be promptly employed, they must not be carried too far, the disease being apt to assume the typhoid character in its progress: and as the chief danger appears to be of suffocation happening from the cause above-mentioned, it is especially important to promote expectoration, first by antimonials, afterwards by squill, the inhalation of steam, &c. not neglecting to support the strength of the patient as the disease advances.

Cata'rrhus a fri'gore. Catarrh from cold.

Cata'rrhus bellinsula'nus. Mumps, or cynanche parotidæa.

Cata'rrhus a conta'gio. The influenza.

Cata'rrhus suffocati'vus. The croup, or cynanche trachealis.

Cata'rrhus vesi'cæ. Strangury, with discharge of mucus.

Catarti'smus. (From *καταρτιζω*, to make perfect.) According to Galen, it is a translation of a bone from a preternatural to its natural situation.

Catasa'rca. (From *κατα*, and *σαρξ*, flesh.) The same as *Anasarca.*

Catasbe'stis. (From *κατα*, and *σϐεννυμι*, to extinguish.) The resolution of tumours without suppuration.

Catascha'smus. (From *κατασχαζω*, to scarify.) Scarification.

Catasei'sis. (From *κατα*, and *σειω*, to shake.) A concussion.

Cataspa'sma. (From *κατασπαω*, to draw backwards.) A revulsion or retraction of humours, or parts.

Catasta'gmos. (From *κατα*, and *ϛαζω*

to distil.) This is the name which the Greeks, in the time of Celsus, had for a distillation.

Catasta'lticus. (From *καταστελλω*, to restrain, or contract.) It signifies styptic, astringent, repressing.

Cata'stasis. (*Καταστασις.*) The constitution, state, or condition of any thing.

Cata'tasis. (From *κατατεινω*, to extend.) In Hippocrates it means the extension of a fractured limb, or a dislocated one, in order to replace it. Also the actual replacing it in a proper situation.

Cata'xis. (From *καταγω*, to break.) A fracture. Also a division of parts by an instrument.

Catecho'menus. (From *κατεχω*, to resist.) Resisting and making ineffectual the remedies which have been applied or given.

CA'TECHU. (It is said, that, in the Japanese language, *kate* signifies a tree, and *chu*, juice.) See *Acacia*.

Cateia'dion. (From *κωτα*, and *εια*, a blade of grass.) An instrument, having at the end a blade of grass, or made like a blade of grass, which was thrust into the nostrils to provoke an hæmorrhage when the head ached. It is mentioned by Aretæus.

Cate'llus. (Dim. of *catulus*, a whelp.) A young whelp. Also a chemical instrument called a cupel, which was formerly in the shape of a dog's head.

Cathæ'resis. (From *καθαιρω*, to take away.) The subtraction or taking away any part or thing from the body. Sometimes it means an evacuation, and Hippocrates uses it for such. A consumption of the body, as happens without manifest evacuation.

Cathære'tica. (From *καθαιρω*, to take away.) Medicines which consume or remove superfluous flesh.

Catha'rma. (From *καθαιρω*, to remove.) The excrements, or humours, purged off from the body.

Catha'rmus. (From *καθαιρω*, to remove.) A purgation of the excrements, or humours. A cure by incantation, or the royal touch.

Catha'rsia. (From *καθαιρω*, to purge.) Cathartics, having a purging property.

CATHA'RSIS. (From *καθαιρω*, to take away.) A purge, or purgation of the excrements, or humours, either medically or naturally.

CATHA'RTICS. (*Cathartica*, sc. *medicamenta*; *καθαρτικα*: from *καθαιρω*, to purge.) Those medicines which, taken internally, increase the number of alvine evacuations. The different articles referred to this class of medicines are divided into five orders.

1. *Stimulating cathartics*, as jalap, aloes, and bitter apple, which are well calculated to discharge accumulations of serum, and are mostly selected for indolent and phlegmatic habits, and those who are hard to purge.

2. *Refrigerating cathartics*, as sulphate of soda, supertartrate of potash, &c. These are better adapted for plethoric habits, and those with an inflammatory diathesis.

3. *Adstringent cathartics*, as rhubarb and damask roses, which are mostly given to those whose bowels are weak and irritable, and subject to diarrhœa.

4. *Emollient cathartics*, as manna, malva, castor oil, and olive oil, which may be given in preference to other cathartics, to infants and the very aged.

5. *Narcotic cathartics*, as tobacco, hyoscyamus, and digitalis. This order is never given but to the very strong and indolent, and to maniacal patients, as their operation is very powerful.

Murray, in his Materia Medica, considers the different cathartics under the two divisions of laxatives and purgatives; the former being mild in their operation, and merely evacuating the contents of the intestines; the latter being more powerful, and even extending their stimulant operation to the neighbouring parts. The following he enumerates among the principal laxatives: — Manna, Cassia fistula, Tamarindus Indica, Ricinus communis, Sulphur, Magnesia. Under the head of purgatives, he names Cassia senna, Rheum palmatum, Convolvulus jalapa, Helleborus niger, Bryonia alba, Cucumis colocynthis, Momordica elaterium, Rhamnus catharticus, Aloe perfoliata, Convolvulus scammonia, Gambogia, Submurias hydrargyri, Sulphas magnesiæ, Sulphas sodæ, Sulphas potassæ, Supertartras potassæ, Tartras potassæ, Tartras potassæ et sodæ, Phosphas sodæ, Murias sodæ, Terebinthina veneta, Nicotiana tabacum.

Catha'rticus sal. See *Sulphas magnesiæ*, and *Sulphas sodæ*.

Catha'rticus hispa'nicus sal. A kind of sulphate of soda, produced near Madrid, from some springs.

Catha'rticus Glaube'ri sal. See *Sodæ sulphas*.

Cathe'dra. (From *καθεζομαι*, to sit.) The anus, or rather, the whole of the buttocks, as being the part on which we sit.

Cathere'tica. (From *καθαιρω*, to remove.) Corrosives. Medicines, which, by corrosion, remove superfluous flesh.

CA'THETER. (*-teris*, m. *καθετηρ*; from *καθιημι*, to thrust into.) A long and hollow tube, that is introduced by surgeons into the urinary bladder, to remove the urine, when the person is unable to pass it. Catheters are either made of silver or of the elastic gum. That for the male urethra is much longer than that for the female, and so curved, if made of silver, as to adapt itself to the urethra.

CATHETERI'SMUS. (From *καθετηρ*, a catheter.) The term given by P. Ægineta to the operation of introducing the catheter.

Cathi′drysis. (From καθιδρυω, to place together.) The reduction of a fracture. The operation of setting a broken bone.

Ca′thmia. A name for litharge.

Ca′thodos. (From κατα, and οδος.) A descent of humours.

Catho′lceus. (From κατα, and ολκεω, to draw over.) An oblong fillet, made to draw over and cover the whole bandage of the head.

Catho′licon. (From κατα, and ολικος, universal.) A panacea, or universal medicine. A term formerly applied to medicines that were supposed to purge all the humours.

Cathy′pnia. (From κατα, and υπνος, sleep.) A profound but unhealthy sleep.

Ca′tias. (From καθιημι, to place in.) An incision knife, formerly used for opening an abscess in the uterus, and for extracting a dead fœtus.

Cati′llus. See *Catellus.*

Ca′tinum alu′men. A name given to potash.

Ca′tinus. (Κατανον.) A crucible.

Cátmint. See *Nepeta.*

Catocatha′rtica. (From κατω, downwards, and καθαιρω, to purge.) Medicines that operate by stool.

Ca′toche. (From κατεχω, to detain.) See *Catalepsis.*

Catochei′lum. (From κατω, beneath, and χειλος, the lip.) The lower lip.

Ca′tochus. (From κατεχω, to detain.) A catalepsy. Also a tetanus or spasmodic disease in which the body is rigidly held in an upright posture.

Ca′tochus cervi′nus. Tetanus, particularly affecting the neck.

Ca′tochus diu′rnus. An occasional tetanus.

Ca′tochus holoto′nicus. Another name for tetanus.

Catomi′smus. (From κατω, below, and ωμος, the shoulder.) By this word, P. Ægineta expresses a method of reducing a luxated shoulder, by raising the patient over the shoulder of a strong man, that by the weight of the body, the dislocation may be reduced.

Cato′psis. (From κατοπτομαι, to see clearly.) An acute and quick perception. The acuteness of the faculties which accompanies the latter stages of consumption.

Cato′pter. (From κατα, and οπτομαι, to see, and, by metaphor, to probe.) A probe. An instrument called a speculum ani.

Catorchi′tes. (From κατα, and ορχις, the orchis.) A wine in which the orchis root has been infused.

Catore′tica. (From κατω, downwards, and ρεω, to flow.) *Catoteretica. Catoterica.* Medicines which purge by stool.

Catotere′tica. See *Catoretica.*

Catulo′tica. (From κατουλοω, to cicatrize.) Medicines that cicatrize wounds.

Catutri′pali. A name of the piper longum.

Cau′calis. (From καυκιον, a cup; or from δαυκαλις, the daucus.) Bastard parsley, so named from the shape of its flower. Also the wild carrot.

Caucaloi′des. (From *caucalis,* and ειδος, a likeness; from its likeness to the flower of the caucalis.) The patella is sometimes so called.

CAU′DA. (From *cado,* to fall; because it hangs or falls down behind.) A tail.

1. The tail of animals.

2. A name formerly given to the os coccygis, that being in tailed animals the beginning of the tail.

3. A fleshy substance, projecting from the lips of the vagina, and resembling a tail, according to Aetius.

4. Many herbs are also named cauda, with the affixed name of some animal, whose tail the herb is supposed to be like; as cauda equina, horse-tail; cauda muris, mouse-tail; and in many other instances.

Cau′da equi′na. The spinal marrow, at its termination about the second lumbar vertebra, gives off a large number of nerves, which, when unravelled, resemble the horse's tail; hence the name. See also *Hippuris vulgaris.*

Cauda′tio. (From *cauda,* a tail.) An elongation of the clitoris.

CAUL. The English name for the omentum. See *Omentum.*

Caule′don. (From καυλος, a stalk.) A tranverse fracture, when the bone is broken, like the stump of a tree.

Cau′liflower. A species of brassica, whose flower is cut before the fructification expands.—The observations which have been made concerning cabbages are applicable here. See *Brassica capitata.* Cauliflower is, however, a far more delicious vegetable.

CAU′LIS. (Kalab. A Chaldean word.)

1. The stem or stalk of a plant.

2. A cabbage.

3. The penis of a man.

Cau′lis flo′rida. Cauliflower.

Caulo′des. (From καυλος, a stem.) The white or green cabbage.

Caulo′ton. (From καυλος, a stem; because it grows upon a stalk.) A name given to the beet.

Cau′ma. (From καιω, to burn.) The heat of the body, or the heat of the atmosphere, in a fever.

Cau′nga. A name of the areca.

Cau′sis. (From καιω, to burn.) A burn; or rather, the act of combustion, or burning.

Causo′des. (From καιω, to burn.) A term applied by Celsus to a burning fever.

Causo′ma. (From καιω, to burn.) An ardent or burning heat and inflammation. A term used by Hippocrates.

Caustic alkali. The pure alkalies are so called. See *Alkali.*

Caustic barley. See *Cevadilla.*

CAUSTICS. (*Caustica,* sc. *medicamenta*; from καιω, to burn; because they always produce a burning sensation.) See *Escharotics.*

Cau′sticum America′num. The cevadilla.

Cau′sticum antimonia′le. Muriate of antimony.

Cau′sticum commu′ne fo′rtius. See *Potassa cum calce.*

Cau′sticum luna′re. See *Argenti nitras.*

Cau′sus. (From καιω, to burn.) An highly ardent fever. According to Hippocrates, a fiery heat, insatiable thirst, a rough and black tongue, complexion yellowish, and the saliva bilious, are its peculiar characteristics. Others also are particular in describing it; but, whether antients or moderns, from what they relate, this fever is no other than a continued *ardent fever* in a bilious constitution. In it the heat of the body is intense; the breath is particularly fiery; the extremities are cold; the pulse is frequent and small; the heat is more violent internally than externally, and the whole soon ends in recovery or death.

Causus, endemial. The name given, by Dr. Mosely, to the yellow fever of the West Indies.

CAUTERY. (From καιω, to burn.) Cauteries were divided, by the antients, into *actual* and *potential;* but the term is now given only to the red-hot iron, or *actual cautery.* This was formerly the only means of preventing hæmorrhages from divided arteries, till the invention of the ligature. It was also used in diseases, with the same view as we employ a blister. *Potential* cautery was the name by which kali purum, or potassa, was distinguished in the former dispensatories of Edinburgh. Surgeons understand, by this term, any caustic application.

CA′VA. The name of a vein, and also of the pudendum muliebre. See *Veins.*

Cave′rna. (From *cavus,* hollow.) A cavern. Also a name of the pudendum muliebre.

Caviare. *Caviarium.* A food made of the hard roes of sturgeon, formed into cakes, and much esteemed by the Russians.

Cavi′cula. (Dim. of *cavilla.*) See *Cavilla.*

Cavi′lla. (From *cavus.*) The ankle, or hollow of the foot.

CA′VITAS. (From *cavus,* hollow.) Any cavity, or hollowness. The auricle of the heart was formerly called the cavitas innominata, the hollow without a name.

Cayenne pepper. See *Capsicum.*

Cazabi. See *Jatropha.*

CEANO′THUS. (From κεανωθος, quia κεει ανωθεν, because it pricks at the extreme part.) A genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Ceano′thus America′nus. *Celastrus. Celastus.* Some noted Indians depend more on this than on the lobelia, for the cure of syphilis, and use it in the same manner as lobelia.

Cea′sma. (From κεω, to split, or divide.) *Ceasmus.* A fissure, or fragment.

Ce′ber. (Arab.) The agallochum. Also the capparis.

Cebipi′ra. (Indian.) A tree which grows in Brazil, decoctions of whose bark are used in baths and fomentations, to relieve pains in the limbs, and cutaneous diseases.

Ce′dar. See *Cedrinum lignum.*

Ce′dma. (From κεδαω, to disperse.) A defluxion, or rheumatic affection, scattered over the parts about the hips.

Ce′dra, esse′ntia de. See *Citrus medica.*

Ce′drinum li′gnum. Cedar, the wood of the *Pinus cedrus* of Linnæus. An odoriferous wood, more fragrant than that of the fir, but possessing similar virtues.

Cedri′tes. (From κεδρος, the cedar-tree.) Wine in which the resin which distils from the cedar-tree has been steeped.

Ce′drium. Cedar. It is also a name for common tar, in old writings.

Cedrome′la. The fruit of the citron-tree.

Cedrone′lla. Turkey baum.

Cedro′stis. (From κεδρος, the cedar-tree.) A name of the white bryony, which smells like the cedar.

Ce′drus. (From *Kedron,* a valley where they grew abundantly.) The *Pinus cedrus* of Linnæus, or the cedar-tree.

Ce′drus America′na. The arbor vitæ.

Ce′drus bacci′fera. The savine.

Cei′ria. (From κειρω, to abrade.) The tape-worm; so called from its excoriating and abrading the intestines.

Célandine. See *Chelidonium majus.*

Cela′strus. (From κελα, a dart, or pole, which it represents.) See *Ceanothus Americanus.*

Cela′stus. The same.

Ce′le. (From κηλη.) A tumour caused by the protusion of any soft part. Hence the compound terms hydrocele, bubonocele.

Ce′lery. The English name for a variety of the apium graveolens.

Celiac artery. See *Cœliac artery.*

Ce′lis. (From καιω, to burn.) A spot or blemish upon the skin, particularly that which is occasioned by a burn.

Ce′lla tu′rcica. See *Sella turcica.*

Ce′llula. (Dim. of *cella,* a cell.) A little cell, or cavity.

Ce′llulæ mastoide′æ. See *Temporal bones.*

CE′LLULAR ME′MBRANE. *Membrana cellulosa. Tela cellulosa. Panniculus adiposus. Membrana adiposa, pinguedinosa,* et *reticularis.* The cellular tissue of the body, composed of laminæ and fibres variously joined together, which is the connecting medium of every part of the body. It is by means of the communication of the cells of this membrane, that the butchers blow up their veal. The cellular membrane is, by some anatomists, distinguished into the reticular and adipose membrane. The former is evidently dispersed throughout the whole body, except the substance of the brain. It makes a bed for the other solids of the body, covers them all, and unites them one to another. The adipose membrane consists of the reticular substance, and a particular apparatus for the secretion of oil, and is mostly found immediately under the skin of many parts, and about the kidneys.

Celoto'mia. (From κηλη, hernia, and τεμνω, to cut.) The operation for hernia.

Ce'lsa. A term of Paracelsus, to signify what is called the beating of life in a particular part.

CE'LSUS, Aure'lius Corne'lius. It is commonly supposed, that this esteemed ancient author was a Roman, of the Cornelian family, born towards the end of the reign of Augustus, and still living in the time of Caligula. But these points are not established upon certain testimony, and it is even disputed whether he practised medicine; though his perfect acquaintance with the doctrines of his predecessors, his accurate descriptions of diseases, and his judicious rules of treatment, appear to leave little room for doubt on that head. At any rate his eight books, "De Medicina," have gained him deserved celebrity in modern times, containing a large fund of valuable information; detailed in remarkably elegant and concise language. In surgery particularly he has been greatly admired, for the methods of practice laid down, and for describing several operations, as they are still performed. There have been numerous editions of his work, and translations of it into the several modern languages.

Ceme'nterium. A crucible.

Ce'nchramis. (From κεγχρος, millet.) A grain or seed of the fig.

Ce'nchrius. A species of herpes that resembles κεγχρος, or millet.

Ceneangei'a. (From κενος, empty, and αγγος, a vessel.) The evacuation of blood, or other fluids, from their proper vessels.

Ceni'gdam. *Ceniplam. Cenigotam. Cenipolam.* The name of an instrument antiently used for opening the head in epilepsies.

Ceniote'mium. A purging remedy, formerly of use in the venereal disease, supposed to be mercurial.

Ceno'sis. (From κενος, empty.) Evacuation. It must be distinguished from *Catharsis*. *Cenosis* imports a general evacuation; *Catharsis* means the evacuation of a particular humour, which offends with respect to quality.

CENTAU'REA. (So called from *Chiron*, the centaur, who is said to have employed one of its species to cure himself of a wound accidentally received, by letting one of the arrows of Hercules fall upon his foot.) The name of a genus of plants in the Linnæan system, of the Order, *Polygamia frustanea*. Class, *Syngenesia*.

Centau'rea be'hen. The systematic name of the officinal *behen album*. *Jacea orientalis patula. Raphonticoides lutea.* The true white behen of the antients. The root possesses astringent virtues.

Centau'rea benedi'cta. The systematic name of the blessed thistle. *Carduus benedictus. Cnicus sylvestris.* Blessed or holy thistle. *Centaurea benedicta; calycibus duplicato-spinosis lanatis involucratis, foliis semidecurrentibus denticulato-spinosis* of Linnæus. This exotic plant, a native of Spain, and some of the Archipelago islands, obtained the name of Benedictus from its being supposed to possess extraordinary medicinal virtues. In loss of appetite, where the stomach was injured by irregularities, its good effects have been frequently experienced. It is a powerful bitter tonic and adstringent. Bergius considers it as antacid, corroborant, stomachic, sudorific, diuretic, and eccoprotic. Chamomile flowers are now generally substituted for the carduus benedictus, and are thought to be of at least equal value.

Centau'rea calcitra'pa. The systematic name of the calcitrapa. *Carduus stellatus. Jacea ramosissima, stellata, rupina.* Common star-thistle. Star-knapweed. The plant thus called in the pharmacopœias, is the *Centaurea calcitrapa; calycibus subduplicato-spinosis, sessilibus; foliis pinnatifidis, linearibus dentatis; caule piloso*, of Linnæus, every part of which is bitter. The juice, or extract, or infusion, are said to cure intermittents; and the bark of the root, and the seeds, have been recommended in nephritic disorders, and in suppression of urine. It scarcely differs, in its effects, from other bitters, and is now little used.

Centau'rea centau'rium. *Rhaponticum vulgare. Centaurium magnum. Centaurium majus.* Greater centaury. The root of this plant was formerly used as an aperient and corroborant in alvine fluxes. It is now totally discarded from the Materia Medica of this country.

Centau'rea cy'anus. The systematic name of the plant which affords the *flores cyani. Cyanus.* Blue-bottle. Corn-flower. The flowers of this plant, *Centaurea cyanus; calycibus serratis; foliis linearibus, integerrimis, infimis dentatis*, of Linnæus, were formerly in frequent use; but their antiphlogistic, antispasmodic, cordial, aperient, diuretic, and other properties are now, with great propriety, forgotten.

Centau'rea solstitia'lis. *Calcitrapa officinalis. Carduus stellatus luteus. Carduus solstitialis. Jacea stellata. Jacea lutea capite spinoso minori. Leucanthe veterum.* St. Barnaby's thistle. It is commended as an antiicteric, anti-cachectic, and lithontriptic, but is, in reality, only a weak tonic.

Centaurioi'des. The gratiola.

CENTAU′RIUM. (From κενταυρος, a centaur; so called because it was feigned that Chiron cured Hercules's foot, which he had wounded with a poisonous arrow, with it.) Centaury. See *Chironia Centaurium.*

Centau′rium ma′gnum.
Centau′rium ma′jus. } See *Centaurea Centaurium*

Centau′rium mi′nus. See *Chironia Centaurium.*

Centau′ry. See *Chironia.*

Centimo′rbia. (From *centum*, a hundred, and *morbus*, a disease.) Nummularia, or moneywort; named from its supposed efficacy in the cure of a multitude of disorders.

Centino′dia. (From *centum*, a hundred, and *nodus*, a knot.) The herb polygonum; so called from its many knots, or joints.

Centi′pedes. (From *centum*, a hundred, and *pes*, a foot.) Woodlice, named from the multitude of their feet.

Centra′tio. (From *centrum*, a centre.) The concentration and affinity of certain substances to each other. Paracelsus expresses by it the degenerating of a saline principle, and contracting a corrosive and exulcerating quality. Hence *Centrum Salis* is said to be the principle and cause of ulcers.

Ce′ntrium. (From κεντεω, to prick.) A plaster recommended by Galen against stitches and pricks in the side.

Ce′ntrum. (From κεντεω, to point or prick.) The middle point of a circle. In chemistry, it is the residence or foundation of matter. In medicine, it is the point in which its virtue resides. In anatomy, the middle point of some parts is so named, as *centrum nerveum*, the middle or tendinous part of the diaphragm.

CE′NTRUM OVA′LE. When the two hemispheres of the brain are removed on a line with a level of the *corpus callosum*, the internal medullary part presents a somewhat oval centre; hence it is called *centrum ovale.* Vieussenius supposed all the medullary fibres met at this place.

Ce′ntrum tendino′sum. The tendinous centre of the diaphragm is so called. See *Diaphragm.*

Ce′ntrum ne′rveum. The centre of the diaphragm is so called. See *Diaphragm.*

Centumno′dia. (From *centum*, a hundred, and *nodus*, a knot; so called from its many knots, or joints.) Common knot-grass. See *Polygonum aviculare.*

Centu′nculus. Bastard pimpernel.

CE′PA. (From κηπος, a woolcard, from the likeness of its roots.) The onion. See *Allium cepa.*

Cepæ′a. A species of onion which used to be esteemed for salads in spring, but is now disregarded.

Cephalæ′a. (From κεφαλη, the head.) The flesh of the head which covers the skull. Also a long-continued pain of the cerebrum, and its membranes.

CEPHALA′LGIA. (From κεφαλη, the head, and αλγος, pain.) *Cephalæa.* The head-ache. It is symptomatic of very many diseases, but is rarely an original disease itself. When mild, it is called cephalalgia; when inveterate, cephalæa. When one side of the head only is affected, it takes the names of *hemicrania*, *migrana*, *hemipagia*, and *megrim*; in one of the temples only, *crotaphos*; and that which is fixed to a point, generally in the crown of the head, is distinguished by the name of *clavus.*

Cephala′lgia catarrha′lis. Head-ache, with catarrh, from cold.

Cephala′lgia inflammato′ria. Phrenitis, or inflammation of the brain.

Cephala′lgia spasmo′dica. The sick head-ache. A species of indigestion.

Cephala′rtica. (From κεφαλη, the head, and αρτιζω, to make pure.) Medicines which purge the head.

CE′PHALE. (Κεφαλη.) The head.

CEPHALIC VEIN. (*Vena cephalica;* so called, because the head was supposed to be relieved by opening it.) The anterior vein of the arm, that receives the cephalic of the thumb.

CEPHA′LICA. (From κεφαλη, the head.) Cephalics. Such remedies as are adapted for the cure of disorders of the head. Of this class are the snuffs, which produce a discharge from the mucous membrane of the nose, &c.

Cepha′lica po′llicis. A branch from the cephalic vein, sent off from about the lower extremity of the radius, running superficially between the thumb and the metacarpus.

Cepha′licus pu′lvis. A powder prepared from asarum.

Cephali′ne. (From κεφαλη, the head.) The head of the tongue. That part of the tongue which is next the root, and nearest the fauces.

CEPHALI′TIS. (From κεφαλη, the head.) Inflammation of the head. See *Phrenitis.*

Cephalono′sus. (From κεφαλη, the head, and νοσος, a disease.) This term is applied to the febris hungarica, in which the head is principally affected.

Cephalo-pharynge′us. (From κεφαλη, the head, and φαρυγξ, the throat.) A muscle of the pharynx, otherwise named *constrictor pharyngis inferior;* which see.

Cephalopo′nia. (From κεφαλη, the head, and ϖονος, pain.) Head-ache; heaviness of the head.

Cepi′ni. Vinegar.

Cepula. Large myrobalans.

CE′RA. Wax. Bees' wax. A solid concrete substance, collected from vegetables by bees, and extracted from their combs after the honey is got out, by heating and pressing them. With rectified spirit it forms, by the assistance of heat, a gelatinous liquid. It is perfectly insoluble in watery liquors. When melted, it assumes the appearance of oil, and in this state is easily combined with oils and liquid fats. It is very inflammable, and burns totally away. In the state in which it is obtained from the combs, it is called yellow wax, *cera flava*; and this, when new, is of a lively yellow colour, somewhat tough, yet easy to break: by age, it loses its fine colour, and becomes harder and more brittle. Yellow wax, after being reduced into thin cakes, and bleached by a long exposure to the sun and open air, is again melted, and formed into round cakes, called virgin wax, or white wax, *cera alba*. The chief medicinal use of wax, is in plasters, unguents, and other like external applications, partly for giving the requisite consistence to other ingredients, and partly on account of its own emollient quality.

CE′RA A′LBA. See *Cera*.

Ce′ra dica′rdo. The carduus pinea.

CE′RA FLA′VA. Yellow wax. See *Cera*.

Cerǽæ. (From *κερας*, a horn.) So Rufus Ephesius calls the cornua of the uterus.

Cerani′tes. (From *κεραννυμι*, to temper together.) A name formerly applied to a pastil, or troch, by Galen.

Ce′ras. (Κερας, a horn.) A wild sort of parsnep is so named from its shape.

CE′RASA. (Κερασος, the cherry-tree; from Κερασουντη, a town in Pontus, whence Lucullus first brought them to Rome; or from *κηρ*, the heart; from the fruit having a resemblance to it in shape and colour.) The cherry. See *Prúnus*.

Ce′rasa nigra. Black cherries. The fruit of the *Prunus Avium*, which see.

Ce′rasa ru′bra, sati′va, or a′nglica. Red cherries. See *Prunus Cerasus*.

Cerasia′tum. (From *cerasus*, a cherry.) A purging medicine in Libavius; so called because the juice of cherries is an ingredient.

Cera′sius. *Crasios*. (From *cerasus*, a cherry.) The name of two ointments in Mesue.

Cera′sma. (From *κεραννυμι*, to mix.) A mixture of cold and warm water, when the warm is poured into the cold.

Ce′rasus. The cherry-tree. See *Cerasa* and *Prunus*.

CE′RATE. (From *cera*, wax.) *Ceratum*. A composition of wax, oil, or lard, with or without other ingredients. The obsolete synonyms are, *cerelæum*, *ceroma*, *ceronium*, *cerotum*, *ceratomalagma*. Cerates take their name from the wax which enters into their composition, and to which they owe their consistence, which is intermediate between that of plasters and that of ointments; though no very definite rule for this consistence is, in fact, either given or observed.

Cera′tia. (From *κερας*, a horn, which its fruit is supposed to resemble.) The siliqua dulcis. See *Ceratonica*.

Cera′tia diphy′llus. See *Courbaril*.

Cerato-glo′ssus. (From *κερας*, a horn, and *γλωσσα*, a tongue.) A muscle, so named from its shape and insertion into the tongue. See *Hyoglossus*.

Cerato-hyoide′us. (From the *os hyoides*.) See *Stylo-hyoideus*.

Ceratoi′des. (From *κερaτος*, the genitive of *κερας*, horn, and *ειδος*, appearance.) See *Cornea*.

Cerato-mala′gma. A cerate.

Cerato′nia si′liqua. The systematic name of the plant which affords the sweet pod. *Ceratium*. *Ceratia*. *Siliqua dulcis*. The pods are about four inches in length, and as thick as one's finger, compressed and unequal, and mostly bent; they contain a sweet brown pulp, which is given in the form of decoction, as a pectoral in asthmatic complaints and coughs.

CERA′TUM. See *Cerate*, and *Ceratum simplex*.

Cera′tum a′lbum. See *Ceratum cetacei*.

Cera′tum calome′lanos. ℞. Calom. ʒj. Cerat. calam. ℥ss. Misce. Some practitioners are partial to this as a dressing for chancres.

Cera′tum calami′næ. Formerly called *ceratum lapidis calaminaris*, and *ceratum epuloticum*. Calamine cerate. Take of prepared calamine, yellow wax, of each half a pound; olive oil, a pint. Mix the oil with the melted wax; then remove it from the fire, and, as soon as it begins to thicken, add the calamine, and stir it constantly, until the mixture becomes cold. A composition of this kind was first introduced under the name of Turner's cerate. It is well calculated to promote the cicatrization of ulcers.

Cera′tum ceta′cei. *Ceratum spermatis ceti*. *Ceratum album*. Spermaceti cerate. Take of spermaceti, half an ounce; white wax, two ounces; olive oil, 4 fluid-ounces. Add the oil to the spermaceti and wax, previously melted together, and stir them until the mixture becomes cold. This cerate is cooling and emollient, and applied to excoriations, &c.: it may be used with advantage in all ulcers, where no stimulating substance can be applied, being extremely mild and unctuous.

Cera′tum coni′i. Hemlock cerate. ℞. unguenti conii ℔j. Spermatis ceti ℥jj. Ceræ albæ ℥iii. Misce. One of the formulæ of St. Bartholomew's hospital, occasionally applied to cancerous, scrophulous, phagedenic, herpetic, and other inveterate sores.

Cera′tum ci′trinum. See *Ceratum resinæ*.

Cera′tum epulo′ticum. See *Ceratum calaminæ*.

Cera′tum la′pidis calamina′ris. See *Ceratum calaminæ*.

Cera'tum litha'rgyri aceta'ti compo'situm. See *Ceratum plumbi compositum*.

Cera'tum ly'ttæ. *Ceratum cantharidis*. Cerate of blistering fly. Take of spermaceti cerate, six drachms; blistering flies, in very fine powder, a drachm. Having softened the cerate by heat, add the flies, and mix them together.

Cera'tum plu'mbi superaceta'tis. *Unguentum cerussæ acetatæ*. Cerate of superacetate of lead. Take of superacetate of lead, powdered, two drachms; white wax, two ounces; olive oil, half a pint. Dissolve the wax in seven fluid-ounces of oil; then gradually add thereto the superacetate of lead, separately rubbed down with the remaining oil, and stir the mixture with a wooden slice, until the whole has united. This cerate is cooling and desiccative.

Cera'tum plu'mbi compo'situm. *Ceratum lithargyri acetati compositum*. Compound cerate of lead. Take of solution of subacetate of lead, two fluid-ounces and a half; yellow wax, four ounces; olive oil, nine fluid-ounces; camphor, half a drachm. Mix the wax previously melted, with eight fluid-ounces of oil; then remove it from the fire, and, when it begins to thicken, add gradually the solution of subacetate of lead, and constantly stir the mixture with a wooden slice, until it gets cold. Lastly, mix in the camphor, previously dissolved in the remainder of the oil. Its virtues are cooling, desiccative, resolvent against chronic rheumatism, &c. &c.; and as a proper application to superficial ulcers, which are inflamed.

Cera'tum resi'næ. *Ceratum resinæ flavæ. Ceratum citrinum*. Resin cerate. Take of yellow resin, yellow wax, of each a pound; olive oil, a pint. Melt the resin and wax together, over a slow fire; then add the oil, and strain the cerate, while hot, through a linen cloth. Digestive.

Cera'tum sabi'næ. Savine cerate. Take of fresh leaves of savine, bruised, a pound; yellow wax, half a pound; prepared lard, two pounds. Having melted together the wax and lard, boil therein the savine leaves and strain through a linen cloth. This article is of late introduction, for the purpose of keeping up a discharge from blistered surfaces. It was first described by Mr. Crowther, and has since been received into extensive use, because it does not produce the inconveniences that follow the constant application of the common blistering cerate. A thick white layer forms daily upon the part, which requires to be removed, that the cerate may be applied immediately to the surface from which the discharge is to be made.

Cera'tum sapo'nis. Soap cerate. Take of hard soap, eight ounces; yellow wax, ten ounces; semi-vitreous oxide of lead, powdered, a pound; olive oil, a pint; vinegar, a gallon. Boil the vinegar, with the oxide of lead, over a slow fire, constantly stirring, until the union is complete; then add the soap, and boil it again in a similar manner, until the moisture is entirely evaporated; then mix in the wax, previously melted with the oil. Resolvent; against scrophulous tumours, &c. It is a convenient application in fractures, and may be used as an external dressing for ulcers.

Cera'tum si'mplex. *Ceratum*. Simple cerate. Take of olive oil, four fluid-ounces; yellow wax, four ounces; having melted the wax, mix the oil with it.

Cera'tum spe'rmatis ce'ti. See *Ceratum cetacei*.

Ce'rberus. (Κερβερος.) A fanciful name given to the compound powder of scammony, because, like the dog Cerberus, it has three heads, or principal ingredients, each of which is eminently active.

Cerchna'leum. (From *κερχω*, to make a noise.) A wheezing, or bubbling noise, made by the trachea, in breathing.

Ce'rchnos. (From *κερχω*, to wheeze.) Wheezing.

Cerchno'des. (From *κερχω*, to wheeze.) One who labours under a dense breathing, accompanied with a wheezing noise.

Cercho'des. The same as cerchnodes.

Ce'rcis. (*κερκις*, from *κρεκω*, to shriek.) This word literally means the spoke of a wheel, and has its name from the noise which wheels often make. In anatomy it means the radius, a bone supposed to be like a spoke. Also a pestle, from its shape.

CERCO'SIS. (From *κερκος*, a tail.) A polypus of the uterus. It is sometimes applied to an enlargement of the clitoris.

Ce'rea. (From *cera*, wax.) The cerumen aurium, or wax of the ear.

Cerea'lia. (Solemn feasts to the goddess Ceres.) All sorts of corn, of which bread or any nutritious substance is made, come under the head of *cerealia*, which term is applied by bromatologists as a genus.

Cerebe'lla uri'na. Paracelsus thus distinguishes urine which is whitish, of the colour of the brain, and from which he pretended to judge of some of its distempers.

CEREBE'LLUM. (Dim. of *cerebrum*.) The little brain. A somewhat round viscus, of the same use as the brain; composed, like the brain, of a cortical and medullary substance, divided by a septum into a right and left lobe, and situated under the tentorium, in the inferior occipital fossæ. In the cerebellum are to be observed the *crura cerebelli*, the fourth ventricle, the *valvula magna cerebri*, and the *protuberantiæ vermiformes*.

CE'REBRUM. (*Quasi carebrum*; from *καρα*, the head.) The brain. A large round viscus, divided superiorly into a *right* and *left hemisphere*, and inferiorly into *six lobes*, two anterior, two middle, and two posterior; situated within the cranium, and surrounded by the dura and pia mater, and tunica arachnoides. It is composed of a *cortical sub-*

stance, which is external; and a *medullary*, which is internal. It has three *cavities*, called *ventricles*; two anterior, or lateral, which are divided from each other by the *septum lucidum*, and in each of which is the *choroid plexus*, formed of blood-vessels; the third ventricle is a space between the thalami nervorum opticorum. The principal prominences of the brain are, the *corpus callosum*, a medullary eminence, conspicuous upon laying aside the hemispheres of the brain; the *corpora striata*, two striated protuberances, one in the anterior part of each lateral ventricle; the *thalami nervorum opticorum*, two whitish eminences behind the former, which terminate in the optic nerves; the *corpora quadrigemina*, four medullary projections called by the antients, *nates* and *testes*; a little cerebrine tubercle lying upon the nates, called the *pineal gland*; and lastly, the *crura cerebri*, two medullary columns which proceed from the basis of the brain to the *medulla oblongata*. The cerebral arteries are branches of the carotid and vertebral arteries. The veins terminate in *sinusses*, which return their blood into the internal jugulars. The use of the brain is to give off nine pairs of nerves, and the spinal marrow, from which thirty-one more pairs proceed, through whose means the various senses are performed, and muscular motion excited. It is also considered as the organ of the intellectual functions.

Ce′rebrum elonga′tum. The medulla oblongata.

Cerefo′lium. A corruption of chærophyllum. See *Scandix*.

Cerefo′lium hispa′nicum. The plant called by us Sweet-cicely.

Cerefo′lium sylve′stre. See *Chærophyllum*.

Ce′rei medica′ti. See *Bougie*.

Cerelæ′um. (From κηρος, wax, and ελαιον, oil.) A cerate, or liniment, composed of wax and oil. Also the oil of tar.

Cerevi′siæ ferme′ntum. Yeast.

CEREVI′SIA. (From *ceres*, corn, of which it is made.) Ale. Beer. Any liquor made from corn.

Cerevi′siæ catapla′sma. Into the grounds of strong beer, stir as much oatmeal as will make it of a suitable consistence. This is sometimes employed as a stimulant and antiseptic to mortified parts.

Ce′ria. (From *cereus*, soft, pliant.) *Ceriæ*. The flat worms which breed in the intestines.

Ce′rion. (From κηριον, a honey-comb.) A kind of achor.

Cero′ma. (From κηρος, wax.) *Ceronium*. Terms used by the antient physicians for an unguent, or cerate, though originally applied to a particular composition which the wrestlers used in their exercises.

Ceropi′ssus. (From κηρος, wax, and ϖισσα, pitch.) A plaster composed of pitch and wax.

Cero′tum. (Κερωτον.) A cerate.

CERU′MEN AU′RIUM. (*Cerumen*; dim. of *cera*, wax.) *Cerea. Aurium sordes. Marmorata aurium. Cypsele. Cypselis. Fugile.* The waxy secretion of the ears, situated in the meatus auditorius externus.

CERU′SSA. (Arab.) Cerusse, or *white lead*. See *Plumbi subcarbonas*.

Ceru′ssa aceta′ta. See *Plumbi superacetas*.

Ce′rvi spi′na. See *Rhamnus catharticus*.

CERVI′CAL. (*Cervicalis*; from *cervix*, the neck.) Belonging to the neck; as cervical nerves, cervical muscles, &c.

Cervi′cal a′rteries. *Arteriæ cervicales*. Branches of the subclavians.

Cervi′cal ve′rtebræ. The seven uppermost of the vertebræ, which form the spine. See *Vertebræ*.

Cervica′ria. (From *cervix*, the neck; so named because it was supposed to be efficacious in disorders and ailments of the throat and neck.) The herb throat-wort.

CE′RVIX. (*-vicis*, f. quasi *cerebri via*; as being the channel of the spinal marrow.) The neck. That part of the body which is between the head and shoulders. The cervix uteri is the neck of the uterus; or that part of it which is immediately above or beyond the os tincæ. This term is also applied to other parts, as cervix vesicæ, ossis, &c.

Cestri′tes. (From κεϛρον, betony.) Wine impregnated with betony.

Ce′strum. (From κεϛρα, a dart; so called from the shape of its flowers, which resemble a dart; or because it was used to extract the broken ends of darts from wounds.) The herb betony.

CETA′CEUM. See *Physeter*.

CE′TERACH. (Blanchard says this word is corrupted from *Pteryga*, ϖτηρυξ, q. v. as peteryga, ceteryga, and ceterach.) *Scolopendria vera. Dorodilla?* Spleenwort. Miltwaste. This small bushy plant, *Asplenium ceterach; frondibus pinnatifidis, lobis alternis confluentibus obtusis* of Linnæus, grows upon old walls and rocks. It has an herbaceous, mucilaginous, roughish taste, and is recommended as a pectoral. In Spain it is given, with great success, in nephritic and calculous diseases.

Cevadi′lla. (Dim. of *ceveda*, barley. Spanish.) *Cevadilla Hispanorum. Sevadilla. Sabadilla. Hordeum causticum. Canis interfector.* Indian caustic barley. The plant whose seeds are thus denominated, is a species of *veratrum*: they are powerfully caustic, and are administered with very great success as a vermifuge. They are also diuretic and emetic. The dose to a child, from two to four years old, is two grains; from hence to eight, five grains; from eight to twelve, ten grains.

Ceyenne pepper. See *Capsicum*.

Cha′a. A Chinese name for tea.

Chacari′llæ co′rtex. See *Croton Cascarilla.*

Chærofo′lium. See *Scandix.*

CHÆROPHY′LLUM. (Χαιροφυλλον: from χαιρω, to rejoice, and φυλλον, a leaf; so called from the abundance of its leaves.) Chervil.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of some plants. See *Scandix,* and *Chærophyllum sylvestre.*

Chærophy′llum sylve′stre. *Cicutaria.* Bastard hemlock. This plant, *Chærophyllum sylvestre; caule lævi striato; geniculis tumidiusculis,* of Linnæus, is often mistaken for the true hemlock. It may with great propriety be banished from the list of officinals, as it possesses no remarkable property.

Chæ′ta. (From χεω, to be diffused.) The human hair.

Chala′sis. (From χαλαω, to relax.) Relaxation.

Chala′stica. (From χαλαω, to relax.) Medicines which relax.

Chala′zion. (From χαλαζα, a hail-stone.) *Chalaza. Chalazium. Grando.* An indolent, moveable tubercle on the margin of the eyelid, like a hail-stone. A species of hordeolum. It is that well-known affection of the eye, called a stye, or stian. It is white, hard, and encysted, and differs from the *crithe,* another species, only in being moveable. Writers mention a division of Chalazion into scirrhous, cancerous, cystic, and earthy.

Cha′lbane. (Καλβανη.) Galbanum.

Chalca′nthum. (From χαλκος, brass, and ανθος, a flower.) Vitriol; or rather, vitriol calcined red. The flowers of brass.

Chalcei′on. A species of pimpinella.

Chalcoi′deum os. The os cuneiforme of the tarsus.

Chalk. See *Creta.*

Chalk-stones. A name given to the concretions in the hands and feet of people violently afflicted with the gout, from their resembling chalk, though chemically different.

Chali′cratum. (From χαλις, an old word that signifies pure wine, and κεραννυμι, to mix.) Wine mixed with water.

Chali′nos. *Chalinus.* That part of the cheeks, which, on each side, is contiguous to the angles of the mouth.

CHALY′BEATE. (*Chalybeata,* sc. *medicamenta;* from *chalybs,* iron, or steel.) Of or belonging to iron. A term given to any medicine into which iron enters; as chalybeate mixture, pills, waters, &c.

CHALY′BEATE WA′TERS. Any mineral water which abounds with iron; such as the waters of Tunbridge, Spa, Pyrmont, Cheltenham, Scarborough, and Hartfel; and many others.

Cha′lybis rubi′go præpara′ta. See *Ferri subcarbonas.*

CHA′LYBS. (From *Chalybes,* a people in Pontus, who dug iron out of the earth.) *Acies.* Steel. The best, hardest, finest, and the closest-grained forged iron. As a medicine, steel differs not from iron.

Cha′lybs tartariza′tus. The ferrum tartarizatum.

Chamæba′lanus. (From χαμαι, on the ground, and βαλανος, a nut.) Wood peas. Earth nuts.

Chamæbu′xus. (From χαμαι, on the ground, and ϖυξος, the box-tree.) The dwarf box-tree.

Chamæce′drus. (From χαμαι, on the ground, and κεδρος, the cedar-tree.) *Chamæcedrys.* A species of dwarf abrotanum.

Chamæci′ssus. (From χαμαι, on the ground, and κισσος, ivy.) Ground-ivy.

Chamæcle′ma. (From χαμαι, on the ground, and κλημα, ivy.) The ground-ivy.

CHAMÆ′DRYS. (From χαμαι, on the ground, and δρυς, the oak; so called from its leaves resembling those of the oak.) See *Teucrium.*

Chamæ′drys inca′na mari′tima. The marum syriacum.

Chamæ′drys frute′scens. A name for teucrium.

Chamæ′drys palu′stris. A name given to scordium.

Chamæ′drys spu′ria. A name given to veronica.

Chamæle′a. (From χαμαι, on the ground, and ελαια, the olive-tree.) See *Daphne alpina.*

Chamælæa′gnus. (From χαμαι, on the ground, and ελαιαγνος, the wild olive.) The myrtus brabantica.

Chamæ′leon. (From χαμαι, on the ground, and λεων, a lion, *i. e.* dwarf lion.) The chamæleon, an animal supposed to be able to change his colour at pleasure. Also the name of many thistles, so named from the variety and uncertainty of their colours.

Chamæ′leon a′lbum. See *Carlina acaulis.*

Chamæ′leon ve′rum. The distaff thistle.

Chamæleu′ce. (From χαμαι, on the ground, and λευκη, the herb colt's-foot.) Tussilago, or colt's-foot.

Chamæli′num. (From χαμαι, on the ground, and λινον, flax.) Linum catharticum, or purging flax.

CHAMÆME′LUM. (From χαμαι, on the ground, and μηλον, an apple; because it grows upon the ground, and has the smell of an apple.) Common Chamomile. See *Anthemis nobilis.*

Chamæme′lum canarie′nse. The *Chrysanthemum frutescens* of Linnæus.

Chamæme′lum chrysa′nthemum. The buphthalmum germanicum.

Chamæme′lum fœ′tidum. The *Anthemis cotula* of Linnæus.

Chamæme′lum flo′re pleno. *Chamæ-*

melum nobile flore multiplici. Double chamomile. A variety of the anthemis nobilis; which see.

Chamæme'lum no'bile. See *Anthemis nobilis.*

Chamæme'lum vulga're. See *Matricaria chamomilla.*

Chamæ'morus. (χαμαιμορεα, from χαμαι, on the ground, and μορεα, the mulberry-tree.) See *Rubus.*

Chamæpeu'ce. (From χάμάι, on the ground, and ϖευκη, the pine-tree.) Camphorata, or stinking ground-pine, formerly said to be antirheumatic.

CHAMÆ'PITYS. (From χαμαι, the ground, and ϖιτυς, the pine-tree.) See *Teucrium.*

Chamæ'pitys moscha'ta. See *Teucrium Iva.*

Chamæ'plion. A name in Oribasius for erysimum, or hedge mustard.

Chamæra'phanum. So Paulus Æginetа calls the upper part of the root of the apium.

Chamæra'phanus. (From χαμαι, on the ground, and ραφανος, the radish.) The upper part of the root of apium, according to P. Ægineta. The smallage, or parsley. Also dwarf radish.

Chamæ'riphes. The palma minor.

Chamærodode'ndron. (From χαμαι, on the ground, and ροδοδενδρον, the rose laurel.) The *Azelæa pontica* of Linnæus.

Chamæ'rubus. (From χαμαι, on the ground, and *rubus,* the bramble.) The chamæmorus.

Chamæspa'rtium. (From χαμαι, on the ground, and σπαρτιον, Spanish broom.) The genista tinctoria.

CHAMBERLEN, Hugh, a native of London, about the middle of the 17th century. He succeeded his father as a practitioner in midwifery, and had also two brothers in the same profession. They invented among them an instrument, the obstetric forceps, which greatly facilitated delivery in many cases, and often saved the child: but to him alone, as most distinguished, the merit has been usually ascribed. In 1683, he published a translation of Mauriceau's Observations, which was much sought after. The instrument procured him great celebrity in this, as well as other countries; and, with successive improvements by Smellie, &c., still continues to be esteemed one of the most valuable adjuvants in the obstetric art. The period of his death is not ascertained.

CHAMBERS. The space between the capsule of the crystalline lens and the cornea of the eye, is divided by the iris into two spaces, called chambers; the space before the iris is termed the anterior chamber; and that behind it, the posterior. They are filled with an aqueous fluid.

Chamomi'lla no'stras. See *Matricaria Chamomilla.*

Chamomi'lla roma'na. See *Anthemis.*

CHA'NCRE. (French. From καρκινος, cancer.) A sore which arises from the direct application of the venereal poison to any part of the body. Of course it mostly occurs on the genitals. Such venereal sores as break out from a general contamination of the system, in consequence of absorption, never have the term chancre applied to them.

Chaoma'ntia si'gna. So Paracelsus calls those prognostics that are taken from observations of the air; and the skill of doing this, the same author calls *Chaomancia.*

Chao'sda. Paracelsus uses this word as an epithet for the plague.

CHAPMAN, Edmund, was born about the end of the 17th century; and, after becoming properly instructed as a surgeon and accoucheur, settled in London, and soon distinguished himself by his success in difficult labours. His plan consisted chiefly in turning the child, and delivering by the feet, when any part but the head presented; also in often availing himself of the forceps of Chamberlen, much improved by himself, and of which he had the merit of first giving an account to the public in his treatise on midwifery, in 1732. He also ably defended the cause of the men-midwives against the attack of Douglas, in a small work, in 1737.

Cha'rabe. (Arab.) A name given to amber; which see.

Cha'radra. (From χαρασσω, to excavate.) The bowels, or sink of the body.

Charamais. Purging hazel-nut.

Chara'ntia. The momordica elaterium.

Chárcoal. See *Carbon.*

Cha'rdone. The Cinara spinosa.

Charistolo'chia. (From χαρις, joy, and λοχια, the flux of women after child-birth; so named from its supposed usefulness to women in childbirth.) The plant mugwort, or artemisia.

CHARLTON, Walter, was born in Somersetshire, 1619. After graduating at Oxford, where he distinguished himself by his learning, he was appointed physician to Charles I., and admitted a fellow of the Royal College of Physicians, in London. He had afterwards the honour of attending Charles II., and was one of the first members of the Royal Society. He was author of several publications, on medical and other subjects; the former of which contained little original matter, but had the merit of spreading the knowledge of the many improvements made about that period, particularly in anatomy and physiology; the principal of them are his "Exercitationes Pathologicæ," and his "Natural History of Nutrition, Life, and voluntary Motion." In 1689, he was chosen president of the College, and held that office two years. He afterwards retired to Jersey, and died in 1707.

Cha′rme. (From χαιρω, to rejoice.) *Charmis.* A cordial antidote mentioned by Galen.

Cha′rpie. (French.) Scraped linen, or lint.

Cha′rta. (Chald.) Paper. The amnios, or interior fœtal membrane, was called the *charta virginea*, from its likeness to a piece of fine paper.

Cha′rtreux, pou′dre de. (So called because it was invented by some friars of the Carthusian order.) A name of the kermes mineral.

Cha′sme. (From χαινω, to gape.) *Chasmus.* Oscitation. Gaping.

Chaste tree. The *Agnus castus.*

Cha′te. The cucumis Ægyptia.

Cheek-bone. See *Jugale os.*

CHEESE. *Caseus.* The coagulum of milk. When prepared from rich milk, and well made, it is very nutritious in small quantities: but mostly indigestible when hard and ill prepared, especially to weak stomachs.

Cheiloca′ce. (From χειλος, a lip, and κακον, an evil.) The lip-evil. A swelling of the lips, or canker in the mouth.

Cheime′lton. (From χειμα, winter.) Chilblains.

CHEIRA′NTHUS. (From χειρ, a hand, and ανθος, a flower; so named from the likeness of its blossoms to the fingers of the hand.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.* The wall-flower.

Cheira′nthus chei′ri. The systematic name of the wall-flower. *Leucoium luteum. Viola lutea.* Common yellow wall-flower. The flowers of this plant, *Cheiranthus cheiri; foliis lanceolatis, acutis, glabris; ramis angulatis; caule fruticoso,* of Linnæus, are recommended as possessing nervine and deobstruent virtues. They have a moderately strong, pleasant smell, and a nauseous, bitter, somewhat pungent taste.

Cheira′psia. (From χειρ, the hand, and απτομαι, to touch.) The act of scratching; particularly the scratching one hand with another, as in the itch.

Chei′ri. (*Cheiri,* Arab.) See *Cheiranthus.*

Cheiria′ter. (From χειρ, the hand, and ιατρος, a physician.) A surgeon whose office it is to remove maladies by operations of the hand.

Cheiri′sma. (From χειριζομαι, to labour with the hand.) Handling. Also a manual operation.

Cheiri′xis. (From χειριζομαι, to labour with the hand.) The art of surgery.

Cheirono′mia. (From χειρονομεω, to exercise with the hands.) An exercise mentioned by Hippocrates, which consisted of gesticulations with the hands, like our dumb-bells.

Che′la. (χηλη, *forceps;* from χεω, to take.) A forked probe, for drawing a polypus out of the nose. Fissures in the feet, or other places.

Che′læ cancro′rum. See *Cancer.*

Che′lidon. The bend of the arm.

CHELIDO′NIUM. (From χελιδων, the swallow. It is so named from an opinion, that it was pointed out as useful for the eyes by swallows, who are said to open the eyes of their young by it; or because it blossoms about the time when swallows appear.) Celandine. A genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.* There is only one species used in medicine, and that rarely.

Chelido′nium ma′jus. *Papaver corniculatum, luteum.* Tetterwort, and great celandine. The herb and root of this plant, *Chelidonium majus; pedunculis umbellatis,* of Linnæus, have a faint, unpleasant smell, and a bitter, acrid, durable taste, which is stronger in the roots than the leaves. They are aperient and diuretic, and recommended in icterus, when not accompanied with inflammatory symptoms. The chelidonium should be administered with caution, as it is liable to irritate the stomach and bowels. Of the dried root, from ʒss to ʒj is a dose; of the fresh root, infused in water, or wine, the dose may be about ℥ss. The decoction of the fresh root is used in dropsy, cachexy, and cutaneous complaints. The fresh juice is used to destroy warts, and films in the eyes; but, for the latter purpose, it is diluted with milk.

Chelido′nium mi′nus. See *Ranunculus ficaria.*

Chelo′ne. (χελωνη.) The tortoise. An instrument for extending a limb, and so called because, in its slow motions, it represents a tortoise. This instrument is mentioned in Oribasius.

Chelo′nion. (From χελωνη, the tortoise; so called from its resemblance to the shell of a tortoise.) A hump, or gibbosity in the back.

CHELTENHAM WATER. One of the most celebrated purging waters in England, and the reputation of it is daily increasing, as it possesses both a saline and chalybeate principle. When first drawn, it is clear and colourless, but somewhat brisk; has a saline, bitterish, chalybeate taste. It does not keep, nor bear transporting to any distance; the chalybeate part being lost by precipitation of the iron, and in the open air it even turns fœtid. The salts, however, remain. Its heat, in summer, was from 50° to 55° or 59°, when the medium heat of the atmosphere was nearly 15° higher. On evaporation, it is found to contain a calcareous earth, mixed with ochre and a purging salt. A general survey of the component parts of this water, according to a variety of analyses, shows that it is decidedly saline, and contains much more salt than most mineral waters. By far the greater part of the salts are of a purgative kind, and therefore an action on the bowels is a constant effect, notwithstanding the considerable quantity of selenite and earthy carbonates which may be supposed to have a contrary tendency. Cheltenham water is, besides, one of the strongest chalybeates we are acquainted with. The iron is suspended entirely by the carbonic acid, of which gas the water contains about an eighth of its bulk; but, from the abundance of earthy carbonates, and oxide of iron, not much of it is uncombined. It has, besides, a slight impregnation of sulphur, but so little as to be scarcely appreciable, except by very delicate tests. The sensible effects produced by this water, are generally, on first taking it, a degree of drowsiness, and sometimes head-ache, but which soon go off spontaneously, even previous to the operation on the bowels. A moderate dose acts powerfully, and speedily, as a cathartic, without occasioning griping, or leaving that faintness and languor which often follow the action of the rougher cathartics. It is principally on this account, but partly too from the salutary operation of the chalybeate, and perhaps the carbonic acid, that the Cheltenham water may be, in most cases, persevered in, for a considerable length of time, uninterruptedly, without producing any inconvenience to the body; and during its use, the appetite will be improved, the digestive organs strengthened, and the whole constitution invigorated. A dose of this water, too small to operate directly on the bowels, will generally determine pretty powerfully to the kidneys. As a purge, this water is drank from one to three pints; in general, from half a pint to a quart is sufficient. Half a pint will contain half a drachm of neutral purging salts, four grains of earthy carbonates, and selenite, about one-third of a grain of oxide of iron; together with an ounce in bulk of carbonic acid, and half an ounce of common air, with a little sulphuretted hydrogen. Cheltenham water is used, with considerable benefit, in a number of diseases, especially of the chronic kind, and particularly those called bilious: hence it has been found of essential service in the cure of glandular obstructions, and especially those that affect the liver, and the other organs connected with the functions of the alimentary canal. Persons who have injured their biliary organs, by a long residence in hot climates, and who are suffering under the symptoms, either of excess of bile or deficiency of bile, and an irregularity in its secretion, receive remarkable benefit from a course of this water, judiciously exhibited. Its use may be here continued, even during a considerable degree of debility; and from the great determination to the bowels it may be employed with advantage to check the incipient symptoms of dropsy, and general anasarca, which so often proceed from an obstruction of the liver. In scrophulous affections, the sea has the decided preference; in painful affections of the skin. called scorbutic eruptions, which make their appearance at stated intervals, producing a copious discharge of lymph, and an abundant desquamation, in common with other saline purgative springs, this is found to bring relief; but it requires to be persevered in for a considerable time, keeping up a constant determination to the bowels, and making use of warm bathing. The season for drinking the Cheltenham water is during the whole of the summer months.

Che′lys. (χελυς, a shell.) The breast is so called, as resembling, in shape and office, the shell of some fishes.

Chely′scion. (From χελυς, the breast.) A dry, short cough, in which the muscles of the breast are very sore.

Che′ma. A measure mentioned by the Greek physicians, supposed to contain two small spoonfuls.

Che′mia. Chemistry; which see.

Che′mical appara′tus. A general expression, denoting the instruments, vessels, machinery, furniture, and utensils of a laboratory.

CHEMISTRY. (χυμια, and sometimes χημια: *chamia*, from *chama*, to burn, Arab. this science being the examination of all substances by fire.) *Chemia. Chimia. Chymia.* The learned are not yet agreed as to the most proper definition of chemistry. Boerhaave seems to have ranked it among the arts. According to Macquer, it is a science, whose object is to discover the nature and properties of all bodies by their analyses and combinations. Dr. Black says, it is a science which teaches, by experiments, the effects of heat and mixture on bodies; and Fourcroy defines it a science which teaches the mutual actions of all natural bodies on each other. "Chemistry," says Jacquin, "is that branch of natural philosophy which unfolds the nature of all material bodies, determines the number and properties of their component parts, and teaches us how those parts are united, and by what means they may be separated and recombined." Mr. Heron defines it, "That science which investigates and explains the laws of that attraction which takes place between the minute component particles of natural bodies." The objects to which the attention of chemists is directed, comprehend the whole of the substances that compose the globe.

CHEMO′SIS. (From χαινω, to gape; because it gives the appearance of a gap, or aperture.) Inflammation of the conjunctive membrane of the eye, in which the white of the eye is distended with blood, and elevated above the margin of the transparent cornea. In Cullen's Nosology, it is a variety of the ophthalmia membranarum, or an inflammation of the membranes of the eye.

Chenopodio-mo'rus. (From *chenopodium* and *morus*, the mulberry; so called because it is a sort of chenopodium, with leaves like a mulberry.) The herb mulberry-blight, or strawberry-spinach.

CHENOPO'DIUM. (From χην, a goose, and πους, a foot; so called from its supposed resemblance to a goose's foot.) The herb chenopody, goose's foot. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

Chenopo'dium ambrosioi'des. The systematic name of the Mexican tea-plant. *Botrys Mexicana. Botrys ambrosioides Mexicana. Chenopodium Mexicanum. Botrys Americana.* Mexico tea. Spanish tea and Artemisian botrys. A decoction of this plant, *Chenopodium ambrosioides; foliis lanceolatis dentatis, racemis foliatis simplicibus,* of Linnæus, is recommended in paralytic cases. Formerly the infusion was drunk instead of Chinese tea.

Chenopo'dium anthelmi'nticum. The seeds of this plant, *Chenopodium anthelminthum; foliis ovato-oblongis dentatis, racemis aphyllis,* of Linnæus, though in great esteem in America for the cure of worms, are never exhibited in this country. They are powdered and made into an electuary, with any proper syrup, or conserve.

Chenopo'dium Bo'trys. The systematic name of the Jerusalem oak. *Botrys vulgaris. Botrys. Ambrosia. Artemisia chenopodium. Atriplex odorata. Atriplex suaveolens.* Jerusalem oak. This plant, *Chenopodium botrys; foliis oblongis sinuatis, racemis nudis multifidis,* of Linnæus, was formerly administered in form of decoction in some diseases of the chest; as humoral asthma, coughs, and catarrhs. It is now fallen into disuse.

Chenopo'dium bo'nus Henri'cus. The systematic name of the English mercury. *Bonus Henricus. Tota bona. Lapathum unctuosum. Chenopodium.* English mercury. The plant to which these names are given in the pharmacopœias, is the *Chenopodium bonus Henricus; foliis triangulari-sagittatis, integerrimis, spicis compositis aphyllis axillaribus,* of Linnæus. It is a native of this country, and common in waste grounds from June to August. The young plant differs little from spinach when cultivated; and in many places the young shoots are eaten in spring like asparagus. The leaves of this plant are accounted emollient, and in this intention have been made an ingredient in decoctions for glysters. They are applied by the common people to flesh wounds and sores under the notion of drawing and healing.

Chenopo'dium fœ'tidum. See *Chenopodium vulvaria.*

Chenopo'dium vulva'ria. The systematic name for the stinking orach. *Atriplex fœtida. Atriplex olida. Vulvaria. Garosmum. Raphex. Chenopodium fœtidum. Blitum fœtidum.* Stinking orach. The very fetid smell of this plant, *Chenopodium; foliis integerrimis rhombeo-ovatis, floribus conglomeratis axillaribus,* of Linnæus, induced physicians to exhibit it in hysterical diseases. It is now superseded by more active preparations.

Che'ras. (From χεω, to pour out.) The struma, or scrophula.

Cherefo'lium. See *Scandix cerefolium.*

Che'rmes. (Arab.) A small berry, full of insects like worms: the juice of which was formerly made into a confection, called confectio alkermes, which has been long disused. Also the worm itself.

Che'rmes minera'lis. Hydro-sulphuret of antimony.

Cherni'bium. *Chernibion.* In Hippocrates it signifies an urinal.

Chero'nia. (From Χειρων, the Centaur.) See *Chironia centaurium.*

Cherry. See *Cerasa nigra* and *Cerasa rubra.*

Cherry, bay. The *Lauro-cerasus.*

Cherry-laurel. The *Lauro-cerasus.*

Cherry, winter. The *Alkekengi.*

Chervi'llum. See *Scandix cerefolium.*

CHESELDEN, William, was born in Leicestershire, 1688. After serving his apprenticeship to a surgeon at Leicester, he came to study at St. Thomas's hospital, to which he afterwards became surgeon. He began to give lectures at the early age of 22, and about the same period was elected Fellow of the Royal Society. Two years after, he published his "Anatomical Description of the Human Body," with some select cases in surgery, which passed through several editions; in one of which he detailed his success in the operation of lithotomy by the lateral method, as it is termed, which he found not so liable to failure as the high operation. He also gave in the Philosophical Transactions, an interesting account of a grown person whom he restored to sight after being blind from infancy; and furnished some other contributions to the same work. Besides being honourably distinguished by some of the French societies, he was appointed principal surgeon to Queen Caroline, to whom he dedicated his splendid work on the bones in 1733. He was four years after chosen surgeon to Chelsea Hospital, and retired from public practice, and lived to the age of 64.

Chesnut, horse. See *Æsculus Hippocastanum.*

Cheu'sis. (From χεω, to pour out.) Liquation. Infusion.

Cheva'stre. A double-headed roller, applied by its middle below the chin; then running on each side, it is crossed on the top of the head; then passing to the nape of the neck, is there crossed: it then passes under the chin, where crossing, it is carried to the top of the head, &c. until it is all taken up.

CHEYNE, George, was born in Scotland, 1670. After graduating in medicine, he came to London, at the age of 30, and published a Theory of Fevers, and five years after a work on Fluxions, which procured his election into the Royal Society; and this was soon followed by his "Philosophical Principles of Natural Religion." Being naturally inclined to corpulency, and indulging in free living, he became, when only of a middle age, perfectly unwieldy, with other marks of an impaired constitution; against which, finding medicines of little avail, he determined to abstain from all fermented liquors, and confine himself to a milk and vegetable diet. This plan speedily relieved the more distressing symptoms, which led him after a while to resume his luxuries; but finding his complaints presently returning, he resorted again to the abstemious plan; by a steady perseverance in which he retained a tolerable share of health to the advanced age of 72. In 1722, in a treatise on the gout, &c. he first inculcated this plan; and two years after greatly enlarged on the same subject, in his celebrated "Essay on Health and Long Life." His "English Malady, or Treatise on Nervous Diseases," which he regarded as especially prevalent in this country, a very popular work, published 1733, contains a candid and judicious narrative of his own case.

Chezana'nce. (From χεζω, to go to stool, and αναγκη, necessity.) It signifies any thing that creates a necessity to go to stool; but, in P. Ægineta, it is the name of an ointment, with which the anus is to be rubbed, for promoting stools.

Chi'a. (From Χιος, an island where they were formerly propagated.) A sweet fig of the island of Chio, or Scio. Also an earth from that island, formerly used in fevers.

Chi'acus. (From Χιος, the island of Scio.) An epithet of a collyrium, whose chief ingredient was wine of Chios.

Chi'adus. In Paracelsus it signifies the same as furunculus.

Chian pepper. See *Capsicum.*

Chian turpentine. See *Pistacia Terebinthus.*

Chia'smus. (From χιαζω, to form like the letter X, chi.) The name of a bandage, whose shape is like the Greek letter X, *chi.*

Chia'stos. The name of a crucial bandage in Oribasius; so called from its resembling the letter X, *chi.*

Chia'stre. The name of a bandage for the temporal artery. It is a double-headed roller, the middle of which is applied to the side of the head, opposite to that in which the artery is opened, and, when brought round to the part affected, it is crossed upon the compress that is laid upon the wound, and then, the continuation is over the coronal suture, and under the chin; then crossing on the compress, the course is, as at the first, round the head, &c. till the whole roller is taken up.

Chi'bou. A spurious species of gum-elemi, spoken of by the faculty of Paris, but not known in England.

Chi'bur. Sulphur.

Chichi'na. Contracted from China chinæ. See *Cinchona.*

Chi'chos. *Chirces.* The affectio bovina, or distemper of black cattle.

Chicken pox. See *Varicella.*

Chickweed. See *Alsine media.*

CHICOYNEAU, Francis, was born at Montpelier in 1672, the second son of a professor there, who becoming blind, he was appointed to discharge his duties, after taking his degrees in medicine. Having acquitted himself very creditably, he was deputed with other physicians to Marseilles in 1720, to devise measures for arresting the progress of the plague, which in the end almost depopulated that city. The zeal which he evinced on that occasion was rewarded by a pension; and on the death of his father-in-law, M. Chirac, in 1731, he was appointed to succeed him as first physician to the king; and received also other honours previously to his death in 1752. He published in 1721, in conjunction with the other physicians, an account of the plague at Marseilles, in which the opinion is advanced, that the disease was not contagious: and having received orders from the king to collect all the observations that had been made concerning that disease, he drew up an enlarged treatise with much candour, and containing a number of useful facts, which was made public in 1744.

CHI'LBLAIN. *Pernio.* An inflammation of the extreme parts of the body, from the application of cold; attended with a violent itching, and soon forming a gangrenous ulcer.

Chi'li, ba'lsamum de. Salmon speaks, but without any proof, of its being brought from Chili. The Barbadoes tar, in which are mixed a few drops of the oil of aniseed, is usually sold for it.

Chiliody'namon. (From χιλιοι, a thousand, and δυναμις, virtue.) An epithet of the herb *Polemonium.* In Dioscorides, this name is given on account of its many virtues.

Chi'lon. (Χειλων.) An inflamed and swelled lip.

Chilpela'gua. A variety of capsicum.

Chitter pin. A species of capsicum.

Chime'thlon. A chilblain.

Chi'mia. See *Chemistry.*

Chimia'ter. (From χυμια, chemistry, and ιατρος, a physician.) A physician who makes the science of chemistry subservient to the purposes of medicine.

Chimo'lea la'xa. Paracelsus means, by this word, the sublimed powder which is separated from the flowers of saline ores.

CHI'NA. (So named from the country of China, from whence it was brought.) See *Smilax China.*

Chi'na chi'næ. A name given to the Peruvian bark.

Chi'na occidenta'lis. *China spuria nodosa. Smilax pseudo-China. Smilax Indica spinosa.* American or West-Indian China. This root is chiefly brought from Jamaica, in large round pieces, full of knots. In scrophulous disorders, it has been preferred to the oriental kind. In other cases it is of similar but inferior virtue.

Chi'na suppo'sita. See *Senecio.*

Chinchi'na. See *Cinchona.*

Chinchi'na Caribæ'a. See *Cinchona Caribæa.*

Chinchi'na de Sa'nta Fe. There are several species of bark sent from Santa Fé; but neither their particular natures, nor the trees which afford them, are yet accurately determined.

Chinchi'na Jamaice'nsis. See *Cinchona Caribæa.*

Chinchi'na ru'bra. See *Cinchona oblongifolia.*

Chinchi'na de St. Lu'cia. St. Lucia bark. See *Cinchona floribunda.*

Chincough. See *Pertussis.*

Chine'nse. The aurantium sinense, or Chinese orange.

Chinese smilax. See *Smilax China.*

Chi'o turpentine. See *Pistacia Terebinthus.*

Chi'oli. In Paracelsus it is synonymous with furunculus.

Chi'ques. A name for the worms which get into the toes of the negroes, and which are destroyed by the oil which flows out of the cashew nut-shell.

CHIRA'GRA. (From χειρ, the hand, and αγρα, a seizure.) The gout in the joints of the hand. See *Arthritis.*

Chiro'nes. (From χειρ, the hand.) Small pustules on the hand and feet, inclosed in which is a troublesome worm.

CHIRO'NIA. (From *Chiron*, the Centaur, who discovered its use.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. (From χειρ, the hand.) An affection of the hand, where it is troubled with chirones.

Chiro'nia Centau'rium. *Centaurium minus vulgare. Centaurium parvum. Centaurium minus.* Centaury. *Chironia; corollis quinquefidis infundibuliformibus, caule dichotomo, pistillo simplici,* of Linnæus. This plant is justly esteemed to be the most efficacious bitter of all the medicinal plants indigenous to this country It has been recommended, by Cullen, as a substitute for gentian, and by several is thought to be a more useful medicine. The tops of the centaury plant are directed for use by the colleges of London and Edinburgh, and are most commonly given in infusion; but they may also be taken in powder, or prepared into an extract.

Chiro'nium. (From Χειρων, the Centaur, who is said to have been the first who healed them.) A malignant ulcer, callous on its edges, and difficult to cure.

Chirothe'ca. (From χειρ, the hand, and τιθημι, to put.) A glove of the scarfskin, with the nails, which is brought off from the dead subject, after the cuticle is loosened by putrefaction, from the parts under it.

CHIRU'RGIA. (From χειρ, the hand, and εργον, a work; because surgical operations are performed by the hand.) Chirurgery, or surgery.

Chi'ton. (Χιτων.) A coat, or membrane.

Chi'um. (From Χιος, the island where it was produced.) An epithet of a wine made at Scio.

Chlia'sma. (From χλιαινω, to make warm.) A warm fomentation, called also thermasma.

Chlora'sma. (From χλωρος, green.) Chlorosis, which see.

Chlo'rine. See *Oxymuriatic acid.*

CHLORO'SIS. (From χλωρος, green, pale; from the yellow-greenish look those have who are affected with it.) *Febris alba. Febris amatoria. Icterus albus.* The green sickness. A genus of disease in the class *cachexiæ*, and order *impetigines* of Cullen. It is a disease which affects young females who labour under a retention or suppression of the menses. Heaviness, listlessness to motion, fatigue on the least exercise, palpitations of the heart, pains in the back, loins, and hips, flatulency and acidities in the stomach and bowels, a preternatural appetite for chalk, lime, and various other absorbents, together with many dyspeptic symptoms, usually attend on this disease. As it advances in its progress, the face becomes pale, or assumes a yellowish hue; the whole body is flaccid, and likewise pale; the feet are affected with œdematous swellings; the breathing is much hurried by any considerable exertion of the body; the pulse is quick, but small; and the person is apt to be affected with many of the symptoms of hysteria. To procure a flow of the menses, proves in some cases a very difficult matter; and where the disease has been of long standing, various morbid affections of the viscera are often brought on, which at length prove fatal. Dissections of those who have died of chlorosis, have usually shewn the ovaria to be in a scirrhous, or dropsical state. In some cases, the liver, spleen, and mesenteric glands, have likewise been found in a diseased state.

The cure is to be attempted by increasing the tone of the system, and exciting the action of the uterine vessels. The first may be effected by a generous nutritive diet, with the moderate use of wine; by gentle and daily exercise, particularly on horse-back; by agreeable company, to amuse and quiet the mind; and by tonic medicines, especially the preparations of iron, joined with myrrh, &c. Bathing will likewise help much to strengthen them, if the temperature of the bath be made gradually lower, as the patient bears it; and sometimes drinking the mineral chalybeate waters may assist. The bowels must be kept regular, and occasionally a gentle emetic will prepare for the tonic plan. The other object of stimulating the uterine vessels may be attained by the exercises of walking and dancing; by frequent friction of the lower extremities; by the pediluvium, hip-bath, &c.; by electric shocks, passed through the region of the uterus; by active purgatives, especially those formulæ containing aloes, which acts particularly on the rectum. These means may be resorted to with more probability of success, when there appear efforts of the system to produce the discharge, the general health having been previously improved. Various remedies have been dignified with the title of emmenagogues, though mostly little to be depended on, as madder, &c. In obstinate cases, the tinctura lyttæ, or savine, may be tried, but with proper caution, as the most likely to avail.

Chnus. (From χναυω, to grind, or rasp.) Chaff. Bran. Also fine wool, or lint, which is, as it were, rasped from lint.

Choke damp. The name given by miners to a noxious air, occasionally found in the bottom of mines and pits. It is heavier than common air, therefore lies chiefly at the bottom of the pits; it extinguishes flame, and is noxious to animals. It is probably carbonic acid. See *Carbonic acid.*

Cho'ana. (From χεω, to pour out.) It is properly a funnel, but is used to signify the infundibulum of the kidney and brain.

Cho'anus. (χοανα, a funnel.) A furnace made like a funnel, for melting metals.

CHO'COLATE. (Dr. Alston says this word is compounded of two Indian words, *choco,* sound, and *atte,* water; because of the noise made in its preparation.) An article of diet prepared from the cacao-nut; highly nourishing, particularly when boiled with milk and eggs. It is frequently recommended as a restorative in cases of emaciation and consumption.

Chœ'nicis. The trepan, so called by Galen and P. Ægineta, from χοινικις, the nave of a wheel.

Chœ'rades. (From χοιρος, a swine.) The same as scrofula.

Chœradole'thron. (From χοιρος, a swine, and ολεθρος, destruction; so named from its being dangerous if eaten by hogs.) Hogbane. A name in Aëtius for the *Xanthium,* or louse-bur.

Choi'ras. (From χοιρος, a swine; so called because hogs are diseased with it.) The scrofula.

Cho'lades. (From χολη, the bile.) So the smaller intestines are called, because they contain bile.

Chola'go. The same as cholas.

Cholago'ga. (From χολη, bile, and αγω, to evacuate.) *Cholegon.* By cholagogues, the antients meant only such purging medicines as expelled the internal fæces, which resembled the cystic bile in their yellow colour, and other properties.

Cho'las. (From χολη, the bile.) All the cavity of the hypochondrium and part of the ilium is so called, because it contains the liver which is the strainer of the gall.

Cho'le. (χολη.) The bile.

CHOLE'DOCHUS DU'CTUS. (*Choledochus:* from χολη, bile, and δεχομαι, to receive; receiving or retaining the gall.) *Ductus communis choledochus.* The common biliary duct, which conveys both cystic and hepatic bile into the intestinum duodenum.

Chole'gon. The same as cholagoga.

CHO'LERA. (From χολη, bile.) *Diarrhœa cholerica. Felliflua passio.* A genus of disease arranged by Cullen in the class *neuroses,* and order *spasmi.* It is a purging and vomiting of bile, with anxiety, painful gripings, spasms of the abdominal muscles, and those of the calves of the legs. There are two species of this genus: 1. *Cholera spontanea,* which happens, in hot seasons, without any manifest cause. 2. *Cholera accidentalis,* which occurs after the use of food that digests slowly, and irritates. In warm climates it is met with at all seasons of the year, and its occurrence is very frequent; but in England, and other cold climates, it is apt to be most prevalent in the middle of summer, particularly in the month of August; and the violence of the disease has usually been observed to be greater in proportion to the intenseness of the heat. It usually comes on with soreness, pain, distension, and flatulency in the stomach and intestines, succeeded quickly by a severe and frequent vomiting, and purging of bilious matter, heat, thirst, a hurried respiration, and frequent but weak and fluttering pulse. When the disease is not violent, these symptoms, after continuing for a day or two, cease gradually, leaving the patient in a debilitated and exhausted state; but where the disease proceeds with much violence, there arises great depression of strength, with cold clammy sweats, considerable anxiety, a hurried and short respiration, and hiccups, with a sinking, and irregularity of the pulse, which quickly terminate in death; an event that not unfrequently happens within the space of 24 hours.

The appearances generally observed on dissection are, a quantity of bilious matter in the primæ viæ; the ducts of the liver relaxed and distended; and several of the viscera have been found displaced, probably by the violent vomiting. In the early period of the disease, when the strength is not much exhausted, the object is to lessen the irritation, and facilitate the discharge of the bile, by tepid demulcent liquids, frequently exhibited. It will likewise be useful to procure a determination to the surface by fomentations to the abdomen, the pediluvium, or even the warm bath. But where the symptoms are urgent, and the patient appears rapidly sinking from the continued vomiting, violent pain, &c. it is necessary to give opium freely, but in a small bulk; from one to three grains, or even more, in a table spoonful of linseed infusion, or with an effervescing saline draught; which must be repeated at short intervals, every hour perhaps, till relief be obtained. Sometimes, where the stomach could not be got to retain the opium, it has answered in the form of clyster; or a liniment containing it may be rubbed into the abdomen; or a blister, applied over the stomach, may lessen the irritability of that organ. Afterwards the bile may be allowed to evacuate itself downwards; or mild aperients, or clysters, given, if necessary, to promote its discharge. When the urgent symptoms are relieved, the strength must be restored by gentle tonics, as the aromatic bitters, calumba, and the like; with a light nutritious diet: strong toast and water is the best drink, or a little burnt brandy may be added if there is much languor. Exposure to cold must be carefully avoided, particularly keeping the abdomen and the feet warm; and great attention is necessary to regulate the bowels, and procure a regular discharge of bile, lest a relapse should happen. It will also be proper to examine the state of the abdomen, whether pressure give pain at any part, because inflammation in the primæ viæ is very liable to supervene, often in an insidious manner; should that be the case, leeches, blistering the part, and other suitable means, must be promptly resorted to.

Chole′rica. (From χολερα, the cholera.) Medicines which relieve the cholera. Also a bilious flux of the bowels, without pain or fever.

Cholice′le. (From χολη, bile, and χηλη, a tumour.) A swelling formed by the bile morbidly accumulated in the gall-bladder.

Cholo′ma. (From χωλος, lame, or maimed.) Galen says that, in Hippocrates, it signifies any distortion of a limb. In a particular sense, it is taken for a halting, or lameness in the leg.

Chondroglo′ssus. (From χονδρον, a cartilage, and γλωσση, the tongue.) A muscle so named from its insertion, which is in the basis or cartilaginous part of the tongue. See *Hyoglossus*.

CHONDRO′LOGY. (*Chondrologia*; from χονδρος, a cartilage, and λογος, a discourse.) A discourse or treatise on cartilages.

Chondro-pharyngæ′us. (From χονδρος, a cartilage, and φαρυγξ, the upper part of the fauces.) A muscle so named because it rises in the cartilaginous part of the tongue, and is inserted in the pharynx.

Cho′ndros. (*Χονδρος*.) A food of the antients, the same as alica. Also any grumous concretion, and a cartilage.

Chondrosynde′smus. (From χονδρος, a cartilage, and συνδεω, to tie together.) A cartilaginous ligament.

Cho′ndrus. See *Chondros*.

Cho′ne. (Χωνη.) The infundibulum.

Cho′ra. (Χωρα.) A region. Galen, in his book De Usu Partium, expresses by it particularly the cavities of the eyes; but, in others of his writings, he intimates by it any void space.

CHO′RDA. A cord. A tendon. A painful tension of the penis in the venereal disease. See *Chordee*. Sometimes the intestines are called chordæ.

Cho′rda ma′gna. A name of the *tendo Achillis*.

CHO′RDA TY′MPANI. A branch of the seventh pair of nerves that passes through the tympanum.

CHO′RDÆ TENDI′NEÆ. The tendinous and cord-like substances which connect the *carneæ columnæ* of the ventricles of the heart to the auricular valves.

CHO′RDÆ WILLI′SII. The small fibres which cross the sinuses of the dura mater. They are so termed, because Willis first described them.

Chorda′psus. (From χορδη, a cord, and απτω, to knit.) A sort of painful colic, where the intestines appear to be twisted into knots.

CHORDEE′. (*Chordé*. French.) A spasmodic contraction of the penis, that sometimes attends gonorrhœa, and is often followed by a hæmorrhage.

CHO′REA SA′NCTI VI′TI. (*Chorea*, χορεια: from χορος, a chorus, which of old accompanied dancing. It is called St. Vitus's dance, because some devotees of St. Vitus exercised themselves so long in dancing, that their intellects were disordered, and could only be restored by dancing again at the anniversary of St. Vitus.) St. Vitus's dance. Convulsive motions of the limbs, as if the person were dancing. It is a genus of disease arranged by Cullen in the class *neuroses*, and order *spasmi*. These convulsive motions, most generally, are confined to one side, and affect principally the arm and leg. When any motion is attempted to be made, various fibres of other muscles act which ought not; and thus a contrary effect is produced from what the patient intended. It is chiefly incident to young persons of both sexes, and makes its attack between the age of ten and fifteen, occurring but seldom after that of puberty.

By some practitioners it has been considered rather as a paralytic affection than as a convulsive disorder, and has been thought to arise from a relaxation of the muscles, which, being unable to perform their functions in moving the limbs, shake them irregularly by jerks. Chorea sancti Viti is occasioned by various irritations, as teething, worms, offensive smells, poisons, &c. It arises likewise in consequence of violent affections of the mind, as horror, fear, and anger. In many cases it is produced by general weakness; and in a few, it takes place from sympathy, at seeing the disease in others.

The fits are sometimes preceded by a coldness of the feet and limbs, or a kind of tingling sensation, that ascends like cold air up the spine, and there is a flatulent pain in the left hypochondrium, with obstinate costiveness. At other times, the accession begins with yawning, stretching, anxiety about the heart, palpitations, nausea, difficulty of swallowing, noise in the ears, giddiness, and pains in the head and teeth; and then come on the convulsive motions.

These discover themselves at first by a kind of lameness, or instability of one of the legs, which the person draws after him in an odd and ridiculous manner; nor can he hold the arm of the same side still for a moment: for if he lays it on his breast, or any other part of his body, it is forced quickly from thence by an involuntary motion. If he is desirous of drinking, he uses many singular gesticulations before he can carry the cup to his head, and it is forced in various directions, till at length he gets it to his mouth; when he pours the liquor down his throat in great haste, as if he meant to afford amusement to the by-standers. Sometimes various attempts at running and leaping take place, and at others, the head and trunk of the body are affected with convulsive motions. In many instances, the mind is affected with some degree of fatuity, and often shows the same causeless emotions, (such as weeping and laughing,) which occur in hysteria. When this disease arises in children, it usually ceases about the age of puberty; and in adults, is often carried off by a change from the former mode of living. Unless it passes into some other disease, such as epilepsy, it is hardly attended with danger.

The leading indications in the treatment of this complaint are, 1. to obviate the several exciting causes; 2. to correct any faulty state of the constitution, which may appear to give a predisposition; 3. to use those means, which experience has shewn best calculated to allay irregular muscular action. Among the sources of irritation, the most common is the state of the bowels; and the steady, but moderate, use of active cathartics has often a great effect upon the disease, improving the appetite and strength at the same time. Senna, scammony, jalap, &c. may be exhibited according to circumstances, often in conjunction with calomel, particularly where the liver is torpid. The general debility usually attending indicates the employment of tonics, as the cinchona, chalybeates, or sulphate of zinc, which is particularly useful; and with these cold bathing, not too long continued, may be advantageously conjoined; also requiring the patient to use muscular exertion, as much as they can readily, will assist materially in the cure. Sometimes in violent cases, and in irritable constitutions, the occasional exhibition of opium, or other sedative, may be required, taking care, however, that the bowels are not confined thereby. Occasionally too, where the above means are not successful, the more powerful antispasmodics may be tried, as æther, camphor, musk, &c. Electricity also has been by some recommended.

CHO′RION. (From χωρεω, to escape; because it always escapes from the uterus with the fœtus.) Shaggy chorion. The external membrane of the fœtus in utero.

CHO′ROID ME′MBRANE. (*Membrana choroidea*; from χοριον, the chorion, and ειδος, resemblance.) The second tunic of the eye, lying immediately under the sclerotica, to which it is connected by vessels. The true knowledge of this membrane is necessary to a perfect idea of the iris and uvea. The tunica choroidea commences at the optic nerve, and passes forwards, with the sclerotic coat, to the beginning of the cornea transparens, where it adheres very firmly to the sclerotic membrane, by means of a cellular membrane, in the form of a white fringe, called the *ciliary circle*. It then recedes from the sclerotica and cornea and ciliary circle, directly downwards and inwards, forming a round disk, which is variously coloured; hence blue, black eyes, &c. This coloured portion, reflected inwards, is termed the *iris*, and its posterior surface is termed *uvea*. The choroid membrane is highly vascular, and its external vessels are disposed like stars, and termed *vasa vorticosa*. The internal surface of this membrane is covered with a black pigment, called the pigment of the choroid membrane.

CHO′ROID PLE′XUS. *Plexus choroideus.* A plexus of blood vessels, situated in the lateral ventricles of the brain.

Cho′roid tu′nic. See *Choroid membrane.*

Chri′sis. (From χριω, to anoint.) An inunction, or anointing of any part.

Christmas rose. See *Helleborus niger.*

Chri′stum. (From χριω, to anoint.) An unguent, or ointment of any kind.

CHRO′MAS. A chromate, or salt, formed by the union of earthy, metallic, or alkaline bases, with chromic acid; as chromate of lead, &c.

Chromati′smus. (From χρωματιζω, to colour.) The morbid discoloration of any of the secretions, as of the urine, or blood.

CHROME. (From χρωμα, colour; because it is remarkable for giving colour to its combinations.)

Natural History.—This metal, which is extremely scarce, and exists only in combination with oxygen, &c. was discovered by Vauquelin. He found it in an ore called red-lead ore of Siberia, *(chromate of lead.)* The colour of this ore is red, with a shade of yellow; when reduced to powder, it is of a bright orange. Chrome has likewise been found in combination with oxygen, iron, alumine, and silex, *(chromate of iron and alumine,)* in the department of Var, in France. It is met with in irregular masses. Its colour is brown, it has very little metallic lustre. Pontier has lately found chrome combined with oxygen and iron, *(chromate of iron,)* in a quarry near Gussin in the road to Cavalaire. It sometimes forms large masses. The emerald of Peru and spinel ruby owe their colours to this metal.

Properties.—Chrome is obtained in small agglutinated masses of a white colour, inclining to grey; it is very hard, extremely brittle and refractory, and crystallizable at an elevated temperature, in feathered filaments on the surface. Its internal fracture presents in some parts close grains, in other parts needles crossing each other.

Exposed to the heat of a blow-pipe, it is covered with a lilac-coloured crust, which becomes green on cooling. Heated by the same apparatus with borax, it does not melt; but a part, after being oxidized, is dissolved in this salt, and communicates to it a very beautiful green colour. Acids have only a weak action on this metal. The nitric is the only acid which produces any remarkable change, it converts it into an oxide. It is capable of combining with three different portions of oxygen, and forming three different oxides. It has not yet been combined with any combustible body. It does not appear to decompose water. It is unalterable by the alkalies. The other properties of this metal are not yet ascertained, neither are its uses known; perhaps it may afford beautiful and durable colours to the painter or the enameller.

Method of obtaining Chrome.—Chrome is obtained from its native combinations, by decomposing them by the alkaline carbonates, precipitating the chromic acid, and heating it strongly in a crucible.

The following method is recommended by Vauquelin. Seventy-two parts of chromic acid are to be introduced into a charcoal crucible, placed within another of porcelain, filled with charcoal dust. The apparatus is then to be put into a furnace, and subjected to a very strong heat. Metallic chrome will then be found in the charcoal crucible. From seventy-two parts, Vauquelin obtained forty-three of metal.

CHRO′MIC A′CID. This is obtained by decomposing the chromate of lead by potash, and treating the chromate of potash with nitric or muriatic acid. It is of an orange-red colour, and a pungent metallic taste; very soluble in water, and crystallizes by gentle evaporation.

CHRO′NIC. (From χρονος, time.) A term applied to diseases which are of long continuance, and mostly without fever. It is used in opposition to the term acute. See *Acute.*

Chru′psia. (From χροα, colour, and οψις, sight.) *Visus coloratus.* A disease of the eyes, in which the person perceives objects of a different colour from their natural one.

CHRYSA′NTHEMUM. (From χρυσος, gold, and ανθεμον, a flower.) 1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia.* Sunflower, or marigold.

2. Many herbs are so called whose flowers are of a bright yellow colour.

Chrysa′nthemum leuca′nthemum. The systematic name of the great ox-eye daisy. *Bellis major. Buphthalmum majus. Leucanthemum vulgare. Bellidioides. Consolida media. Oculus bovis.* Ox-eye daisy. Maudlin wort. The *Chrysanthemum leucanthemum; foliis amplexicaulibus, oblongis, supernè serratis, infernè dentatis*, of Linnæus. The flowers and herb were formerly esteemed in asthmatic and phthisical diseases, but have now deservedly fallen into disuse.

Chry′se. (From χρυσος, gold.) The name of a yellow plaster.

Chrysele′ctrum. (From χρυσος, gold, and ηλεκτρον, amber.) Amber, of a golden yellow colour.

Chrysi′ppea. (From *Chrysippus*, its discoverer.) A herb enumerated by Pliny.

Chrysi′tis. (From χρυσος, gold.) Litharge. The yellow foam of lead. Also the herb yarrow, from the golden colour of its flower.

Chrysoba′lanus. (From χρυσος, gold, and βαλανος, a nut; so named because of its colour, which, before it is dried, is yellow.) The nutmeg.

Chrysoco′lla. (From χρυσος, gold, and κολλη, cement.) Gold solder. Borax.

Chryso′coma. (From χρυσος, gold, and κομη, hair; so called from its golden, hair-like appearance.) The herb milfoil, or yarrow.

Chrysogo′nia. (From χρυσος, gold, and γινομαι, to become.) The tincture of gold.

Chrysola′chanon. (From χρυσος, gold, and λαχανον, a pot-herb; so named from its having a yellow leaf.) The herb orach, or atriplex.

CHRYSOSPLE′NIUM. (From χρυσος, gold, and ασπλενιον, spleenwort.) The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Digynia.* Golden saxifrage.

Chrysu′lcus. (From χρυσος, gold, and ελκω, to take away.) The aqua regia is so called, as having the property to dissolve gold.

Chyla′ria. (From χυλος, chyle.) A discharge of a whitish mucous urine, of the colour and consistence of chyle.

CHYLE. (Χυλος. *Chylus.*) The milk-like liquor observed some hours after eating, in the lacteal vessels of the mesentery, and in the thoracic duct. It is separated by digestion from the chyme, and is that fluid substance from which the blood is formed.

The chyle is absorbed by the mouths of the lacteal vessels, which are in the greatest number in the jejunum and ileum, whilst the fæx of the chyme, with the bile, are propelled into the large intestines. The chyle of the human body smells like milk, has a sweetish taste, a white colour, and a consistence thinner than blood and milk. Its specific gravity is lighter than that of the blood, and hence it is that chyle is occasionally seen swimming on the blood, if a vein be opened some hours after eating. The quality of the chyle is similar to that of milk; for, like it, it coagulates and is acescent: but sometimes its nature is altered from bad digested food or medicines: thus the chyle becomes blue, from eating indigo; yellow, from the yolk of eggs, &c. The quantity of chyle depends upon that of the ingesta, and their greater or less nourishing power: from five or six pounds of food, very little more than two pounds of chyle are elaborated.

The constituent principles of chyle are, 1. *Water*, which forms its greatest part. 2. *Oily cream*, which chemistry teaches to be hydrogen and carbon. 3. *Cheese*, which, by the vis vitalis, is formed by the carbon and azote of the ingested food. 4. *Earth*, which may be obtained from lacteal calculi, that are occasionally found in the receptaculum chyli and lacteals. 5. *Animal lymph*, which is mixed with the gastric and enteric juices.

The nutritive principles of vegetables, are starch, gum, oil, gluten, and sugar. The nutritive principles of animal substances, are gelatin, albumen, fibrin, and oil; and hence the reason why the chyle, separated from vegetables, is of the same nature with that prepared from animal ingesta, because the principles of both are dissolved into their elements, which are the same in animal and vegetable food: thus the *cream* of the chyle is formed of carbon and hydrogen; and the *cheese* of the chyle, from the carbon and azote of both animal and vegetable substances.

The chyle is mixed with the albuminous and gelatinous lymph in the thoracic duct, which receives them from the lymphatics.

The uses of the chyle are, 1. To supply the matter from which the blood and other fluids of our body are prepared; from which fluids the solid parts are formed. 2. By its acescent nature, it somewhat restrains the putrescent tendency of the blood: hence the dreadful putridity of the humours from starving; and thus milk is an excellent remedy against scurvy. 3. By its very copious aqueous latex, it prevents the thickening of the fluids, and thus renders them fit for the various secretions. 4. The chyle secreted in the breasts of puerperal women, under the name of milk, forms the most excellent nutriment of all aliments for new-born infants.

CHYLIFICA′TION. (From *chylus*, and *fio*, to become.) *Chylifactio.* The process carried on in the small intestines, and principally in the duodenum, by which the chyle is separated from the chyme.

Chyli′sma. (From χυλος, juice.) An expressed juice.

CHYLOPOE′TIC. (*Chylopoeticus;* from χυλος, chyle, and ϖοιεω, to make.) Chylopoietic. Any thing connected with the formation of chyle; thus chylopoetic viscera, chylopoetic vessels, &c.

Chylo′sis. (From χυλος, juice.) Chylification, or the changing the food into chyle.

Chylosta′gma. (From χυλος, juice, and ϛαζω, to distil.) The distillation or expression of any juice, or humid part from the rest.

Chylosta′gma diaphore′ticum mindere′ri. A distillation of Venice treacle and mithridate.

CHYME. (*Chymus;* from χυμος, which signifies humour or juice.) The ingested mass of food that passes from the stomach into the duodenum, and from which the chyle is prepared in the small intestines by the admixture of the bile, &c.

Chy′mia. Chemistry.

Chymia′ter. A chemical physician. See *Chimiater.*

Chymia′tria. (From χυμια, chemistry, and ιαομαι, to heal.) The art of curing diseases by the application of chemistry to the uses of medicine.

Chymo′sis. See *Chemosis.*

Chy′nlen radix. A cylindrical root, of the thickness of a goose-quill, brought from China. It has a bitterish taste, and imparts a yellow tinge to the saliva. The Chinese hold it in great estimation as a stomachic, infused in wine.

Chy′sis. (From χυω, to pour out.) Fusion, or the reduction of solid bodies into fluid by heat.

Chy′tlon. (From χυω, to pour out.) An anointing with oil and water.

Ciba′lis fi′stula. An obsolete term for the œsophagus.

Ciba′tio. (From *cibus*, food.) In chemistry, it means incorporation: also the taking of food.

Ci′bur. An obsolete term for sulphur.

CICATRISA′NTIA. (*Cicatrisantia*, sc. *remedia;* from *cicatrico*, to skin over.) Such applications as dispose wounds and ulcers to dry up and heal, and to be covered with a skin.

CICA'TRIX. (From *cicatrico*, to heal up or skin over.) A seam or scar upon the skin after the healing of a sore or ulcer.

CI'CER. (A plant so called. The Cicerones had their name from this pulse, as the Pisones had from the pisum or pea, and the Lentuli from the lens or lentil.)

1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Decandria*. The vetch.

2. The pharmacopœial name of the common cich or ciches.

Ci'cer arie'tinum. The systematic name of the *cicer* plant. *Erebinthus*. *Cicer arietinum; foliis serratis*, of Linnæus. The seeds have been employed medicinally, but are now fallen into disuse. In some places they are toasted, and used as coffee; and in others, ground into a flour for bread. The colour of the arillus of the seed is sometimes white, red, or black; hence the distinction into *cicer album*, *rubrum*, and *nigrum*.

Ci'cera. (From *cicer*, the vetch.) A small pill of the size of a vetch.

Ci'cera ta'rtari. Small pills composed of turpentine and cream of tartar, of the size of a vetch.

CICHO'RIUM. (Originally, according to Pliny, an Egyptian name, and adopted by the Greeks. It is written sometimes Κιχορειον: whence Horace has *cichoreæ*, *levesque malvæ*: sometimes Κιχοριον, or Κιχωριον. It is supposed by some to have this name, *παρα το δια των χωριων κιειν*, from its creeping through the fields. Others derive it from *κιχεω*, *invenio*; on account of its being so readily found, or so common.) Succory.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*.

2. The pharmacopœial name of the wild cichory. See *Cichorium intybus*.

Cicho'rium endi'via. The systematic name of the endive. *Endivia*. *Endiva*. Endive. This plant, *Cichorium endivia; floribus solitariis, pedunculatis; foliis integris, crenatis*, of Linnæus, is an extremely wholesome salad, possessing bitter and anodyne qualities.

Cicho'rium i'ntybus. The systematic name of the wild succory. *Cichorium*. Succory. This plant, called also *Cichoreum*, *Cichorium sylvestre vel officinarum*, is the *Cichorium intybus; floribus geminis, sessilibus; foliis runcinatis*, of Linnæus.

It belongs to the same family with the garden endive, and by some botanists has been supposed to be the same plant in its uncultivated state; but the endive commonly used as salad is an annual, or at most a biennial plant, and its parent is now known to be the *cichorium endivia*. Wild succory or cichory, abounds with a milky juice, of a penetrating bitterish taste, and of no remarkable smell, or particular flavour: the roots are more bitter than the leaves or stalks, and these much more so than the flowers. By culture in gardens, and by blanching, it loses its bitterness, and may be eaten early in the spring in salads. The roots, if gathered before the stem shoots up, are also eatable, and when dried may be made into bread. The roots and leaves of this plant are stated by Lewis to be very useful aperients, acting mildly and without irritation, tending rather to abate than to increase heat, and which may therefore be given with safety in hectic and inflammatory cases. Taken freely, they keep the belly open, or produce a gentle diarrhœa; and when thus continued for some time, they have often proved salutary in the beginning obstructions of the viscera, in jaundices, cachexies, hypochondriacal and other chronical disorders. A decoction of this herb, with others of the like kind, in whey, and rendered purgative by a suitable addition of polychrest salt, was found an useful remedy in cases of biliary calculi, and promises advantage in many complaints requiring what have been termed attenuants and resolvents. The virtues of succory, like those of dandelion, reside in its milky juice; and we are warranted, says Dr. Woodville, in asserting, that the expressed juice of both these plants, taken in large doses frequently repeated, has been found an efficacious remedy in phthisis pulmonalis, as well as the various other affections above-mentioned. The milky juice may be extracted by boiling in water, or by pressure. The wild and the garden sorts are used indifferently. If the root is cut into small pieces, dried, and roasted, it resembles coffee, and is sometimes a good substitute for it.

Ci'chory. See *Cichorium intybus*.

Ci'chory, wild. See *Cichorium intybus*.

Cicinde'la. (A dim. of *candela*: i. e. a little candle; so called from its light.) The glow-worm. Some think them anodyne, others lithontriptic, though, as the editor of Motherby's Dictionary justly observes, probably neither.

Cici'num oleum. (From *κικι*, the ricinus.) An oil, obtained by boiling the bruised seeds of the *Jatropha curcas* of Linnæus. It is somewhat similar in its properties to castor oil. See *Ricinus*.

Ci'cla. A name for the beta alba.

CICU'TA. (*Quasi cæcuta*, blind; because it destroys the sight of those who use it. Cicuta signifies also the internode, or space between two joints of a reed; or the hollow stem of any plant which the shepherds used for making their rural pipes. *Est mihi disparibus septem conjuncta cicutis fistula.* — Virgil.) Hemlock.

1. The name of a genus of plants in the

Linnæan system. Class, *Pentandria*. Order, *Digynia*.

2. The name, in most pharmacopœias, of the common hemlock. See *Conium*.

Cicu′ta aqua′tica. See *Cicuta virosa*.

Cicu′ta viro′sa. *Cicuta aquatica. Cicutaria virosa. Sium majus alterum angustifolium. Sium erucæ folio.* Long-leaved water hemlock and cowbane. This plant, *Cicuta virosa; umbellis oppositifoliis; petiolis marginatis obtusis*, of Linnæus, is seldom employed medicinally in the present day. It is an active poison, and often eaten by mistake for the wild smallage, the *Apium graveolens* of Linnæus; when it produces tremors, vertigo, a violent burning at the stomach, epilepsy, convulsions, spasms of the jaw, a flowing of blood from the ears, tumefaction of the abdomen, and death.

Cicuta′ria. (*Cicutaria*; from *cicuta*, hemlock.) Bastard hemlock. See *Chærophyllum sylvestre*.

Cicuta′ria aqua′tica. A name for the phellandrium aquaticum.

Cicuta′ria viro′sa. See *Cicuta virosa*.

Cido′nium. See *Pyrus cydonia*.

CI′LIAR LI′GAMENT. (From *cilium*, the eyelid.) *Ligamentum ciliare*. The circular portion that divides the choroid membrane from the iris, and which adheres to the sclerotic membrane. It appears like a white circular ring. See *Choroid membrane*.

Cilia′re ligame′ntum. See *Choroid membrane*.

Cilia′ris mu′sculus. That part of the musculus orbicularis palpebrarum which lies nearest the cilia, considered by Riolan as a distinct muscle.

CI′LIUM. (From *cileo*, to move about.) The eyelid or eyelash.

Ci′liary pro′cesses. The white folds at the margin of the uvea in the eye, covered with a black matter, which proceed from the uvea to the crystalline lens, upon which they lie.

Ci′llo. (From *cilium*, the eyelid.) One who is affected with a spasm or trembling of the eyelids.

Cillo′sis. (From *cilium*, the eyelid.) A spasmodic trembling of the eyelids.

Ci′mex. (From κειμαι, to inhabit; so called because they infest houses.) The wall-louse or bug. *Cimex domesticus*. Six or seven are given inwardly to cure the ague, just before the fits come on, and have the same effect with every thing nauseous and disgusting.

Cimo′lia a′lba. (From Κιμωλος, Cimolus, an island in the Cretan sea, where it is procured.) Tobacco-pipe clay. Its virtues are similar to those of the bolar earths; but it is never administered medicinally.

Cimo′lia purpure′scens. Fullers-earth. A bolar earth, of a greyish-brown colour.

Ci′na ci′næ. See *Cinchona*.

Ci′næ se′men. See *Artemisia santonica*.

CI′NARA. (From κινεω, to move; *quasi movet ad venerem vel urinam*.) Artichoke.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*.

2. The pharmacopœial name for the common artichoke. See *Cinara scolymus*.

Ci′nara sco′lymus. The systematic name of the artichoke, called in the pharmacopœias *Alcocalum. Articocalus. Artischocas lævis. Costus nigra. Carduus sativus non spinosus. Cinara hortensis. Scolymus sativus. Carduus domesticus capite majore. Carduus altilis. Cinara; foliis subspinosis pinnatis indivisisque, calycinis squamis ovatis*, of Linnæus. A native of the southern parts of Europe, but cultivated here for culinary purposes. The leaves are bitter, and afford, by expression, a considerable quantity of juice, which, when strained, and mixed with an equal quantity of white wine, has been given successfully in dropsies, in the dose of 3 or 4 table-spoonfuls every night and morning, but it is very uncertain in its operation.

CINCHO′NA. (Geoffroy states that the use of this bark was first learned from the following circumstance: — Some cinchona trees being thrown by the winds into a pool of water, lay there till the water became so bitter, that every body refused to drink it. However one of the neighbouring inhabitants being seized with a violent paroxysm of fever, and finding no other water to quench his thirst, was forced to drink of this, by which he was perfectly cured. He afterwards related the circumstance to others, and prevailed upon some of his friends, who were ill of fevers, to make use of the same remedy, with whom it proved equally successful. The use of this excellent remedy, however, was very little known till about the year 1638, when a signal cure having been performed by it on the Spanish viceroy's lady, the Countess del Cinchon, at Lima, it came into general use, and hence it was distinguished by the appellation of *cortex cinchonæ*, and *pulvis comitissæ*, or the Countess's powder. On the recovery of the Countess, she distributed a large quantity of the bark to the Jesuits, in whose hands it acquired still greater reputation, and by them it was first introduced into Europe, and thence called *cortex*, or *pulvis jesuiticus, pulvis patrum*; and also Cardinal del Lugo's powder, because that charitable prelate bought a large quantity of it at a great expence, for the use of the religious poor at Rome.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*. Cinchona, or Peruvian bark-tree.

2. The pharmacopœial name of several kinds of barks; called also *Cortex*. *Cortex china, china* or *chinchina; kina kina*, or *kinkina*; and *quina quina*, or *quinquina*. The trees affording which, grow wild in the hilly parts of Peru; the bark is stripped

from the branches, trunk and root, and dried. Three kinds of it are now in use.

CORTEX CINCHONÆ CORDIFOLIÆ.

The plant which affords this species is the *Cinchona cordifolia* of Zea: the *Cinchona officinalis* of Linnæus: the *Cinchona macrocarpa* of Willdenow. Heart-leaved cinchona.

The bark of this tree is called *yellow bark*, (because it approaches more to that colour than either of the others do,) is in flat pieces, not convoluted like the pale, nor dark-coloured like the red; externally smooth internally of a light cinnamon colour, friable and fibrous; has no peculiar odour different from the others, but a taste incomparably more bitter, with some degree of astringency.

CORTEX CINCHONÆ LANCIFOLIÆ.

This species is obtained from the *Cinchona lancifolia* of Zea. Lance-leaved cinchona. This is the *Quilled bark*, which comes in small quilled twigs, breaking close and smooth, friable between the teeth, covered with a rough coat of a brownish colour, internally smooth and of a light brown; its taste is bitter and slightly astringent; flavour slightly aromatic, with some degree of mustiness.

CORTEX CINCHONÆ OBLONGIFOLIÆ.

This kind is procured from the *Cinchona oblongifolia* of Zea. Oblong-leaved cinchona. This bark is the *red bark*: it is in large thick pieces, externally covered with a brown rugged coat, internally more smooth and compact, but fibrous; of a dark-red colour; taste and smell similar to that of the *cinchonæ lancifoliæ cortex*, but the taste rather stronger.

From the general analysis of bark, it appears to consist, besides the woody matter which composes the greater part of it, of gum, resin, gallic acid, of very small portions of tannin and essential oil, and of several salts having principally lime for their basis. Seguin also supposed the existence of gelatin in it, but without sufficient proof. Cold water infused on pale bark for some hours, acquires a bitter taste, with some share of its odour; when assisted by a moderate heat, the water takes up more of the active matter; by decoction, a fluid, deep-coloured, of a bitter styptic taste, is obtained, which, when cold, deposits a precipitate of resinous matter and gallic acid. By long decoction, the virtues of the bark are nearly destroyed, owing to the oxygenation of its active matter. Magnesia enables water to dissolve a larger portion of the principles of bark, as does lime, though in an inferior degree. Alkohol is the most powerful solvent of its active matter. Brandy and other spirits and wines afford also strong solutions, in proportion to the quantity of alkohol they contain. A saturated solution of ammonia is also a powerful solvent; vinegar is less so even than water. By distillation, water is slightly impregnated with the flavour of bark; it is doubtful whether any essential oil can be obtained.

The action of menstrua on the red bark is nearly the same, the solutions only being considerably stronger, or containing a larger quantity of resinous matter and of the astringent principle.

The analysis of the yellow bark, shows that its active principles are more concentrated than in either of the others, affording to water, alkohol, &c. tinctures much stronger both in bitterness, and astringency, especially in the former principle.

From the general analysis of these barks, it appears that they consist of nearly the same proximate principles, which vary in their proportions; the most active component parts are the resin, extractive matter and the gallic acid, and these in combination probably constitute the tonic quality of bark. In the best pale bark, this active matter amounts to about one-eighth.

The red bark has been considered as superior to the pale, the yellow is represented, apparently with justice, as being more active than either of the others.

The effects of Peruvian bark, are those of a powerful and permanent tonic, so slow in its operation, that its stimulating property is scarcely perceptible by any alteration in the state of the pulse, or of the temperature of the body. In a large dose, it occasions nausea and head-ache; in some habits it operates as a laxative; in others it occasions costiveness. It is one of those medicines, the efficacy of which, in removing disease, is much greater than could be expected, *à priori*, from its effects on the system in a healthy state.

Intermittent fever is the disease, for the cure of which bark was introduced into practice, and there is still no remedy which equals it in power.

The disputes respecting the mode of administering it are now settled. It is given as early as possible, with perhaps the previous exhibition of an emetic to evacuate the stomach; it is repeated in the dose of one scruple or half a drachm every second or third hour, during the interval of the paroxysm; and it may even be given during the hot fit, but it is then more apt to excite nausea.

In remittent fever it is given with equal freedom, even though the remission of the fever may be obscure.

In some forms of continued fever which are connected with debility, as in typhus, cynanche maligna, confluent small-pox, &c. it is regarded as one of the most valuable remedies. It may be prejudicial, however, in those diseases where the brain, or its membranes are inflamed, or where there is much irritation, marked by subsultus tendinum, and convulsive motions of the extremities; and in pure typhus it appears to be less useful in the beginning of the disease than in the convalescent stage.

Even in fevers of an opposite type, where there are marks of inflammatory action, particularly in acute rheumatism, bark has been found useful after blood-letting. In erysipelas, in gangrene, in extensive suppuration and venereal ulceration, the free use of bark is of the greatest advantage.

In the various forms of passive hæmorrhagy, in many other diseases of chronic debility, dyspepsia, hypochondriasis, paralysis, rickets, scrofula, dropsy, and in a variety of spasmodic affections, epilepsy, chorea, and hysteria, it is administered as a powerful and permanent tonic, either alone, or combined with other remedies suited to the particular case.

Its usual dose is half a drachm. The only inconvenience of a larger dose is its sitting uneasy on the stomach. It may therefore, if necessary, be frequently repeated, and in urgent cases may be taken to the extent of an ounce, or even two ounces in twenty-four hours.

The powder is more effectual than any of the preparations; it is given in wine, in any spirituous liquor; or, if it excite nausea, combined with an aromatic. The cold infusion is the least powerful, but most grateful; the decoction contains much more of the active matter of the bark, and is the preparation generally used when the powder is rejected; its dose is from two to four ounces. The spirituous tincture, though containing still more of the bark, cannot be extensively used on account of the menstruum, but is principally employed, occasionally, and in small doses of two or three drachms, as a stomachic. The extract is a preparation of considerable power, when properly prepared, and is adapted to those cases, where the remedy requires to be continued for some time. It is then given in the form of pill, in doses of from five to fifteen grains.

Bark is likewise sometimes given in the form of enema; one scruple of the extract, or two drachms of the powder, being diffused in four ounces of starch mucilage. The decoction is also sometimes applied as a fomentation to ulcers.

Cincho′na Caribæ′a. The systematic name of the Caribæan bark-tree. It grows in Jamaica, where it is called the sea-side beech. According to Dr. Wright, the bark of this tree is not less efficacious than that of the cinchona of Peru, for which it will prove an useful substitute; but by the experiments of Dr. Skeete, it appears to have less astringent power.

Cincho′na floribu′nda. The systematic name of the plant which affords the Saint Lucè bark; —*floribus paniculatis glabris, capsulis turbinatis lævibus, foliis ellipticis acuminatis glabris;* it has an adstringent, bitter taste, somewhat like gentian. It is recommended in intermittents, putrid dysentery, and dyspepsia: it should always be joined with some aromatic. Dr. Withering considers this bark as greatly inferior to that of the other species of this genus. In its recent state it is considerably emetic and cathartic, properties which in some degree it retains on being dried; so that the stomach does not bear this bark in large doses, and in small ones its effects are not such as to give it any peculiar recommendation.

Cincho′na officina′lis. The name of the officinal Peruvian bark. See *Cinchona.*

Cincho′na Sa′ncta Fe. Several species of cinchona have been lately discovered at Sancta Fé, yielding barks both of the pale and red kind; and which, from their sensible qualities, are likely upon trial to become equally useful with those produced in the kingdom of Peru.

Cincho′na ru′bra. See *Cinchona.*

Cincho′na fla′va. See *Cinchona.*

Cinci′nnus. The hair on the temples. See *Capillus.*

Cincle′sis. (From κιγκλιζω, to move.) *Cinclismus.* An involuntary nictitation or winking. *Vogel.*

Cinera′rium. (From *cinis,* ashes.) The ash-hole of a chemical instrument.

Ci′neres. (plur. of *cinis,* ashes.) Ashes.

CI′NERES CLAVELLA′TI. (*Clavellatus;* from *clavus,* a wedge. The name of *cineres clavellati* originated from the little wedges or billets into which the wood was cut to make potash.) See *Potassa.*

Ci′neres ru′ssici. See *Potassa impura.*

CINERI′TIOUS. (From *cinis,* ashes.) Of the colour of ashes. A name applied to the cortical substance of the brain, from its resemblance to an ash-colour.

Cineri′tium. (From *cinis,* ashes.) A cupel or test; so named from its being commonly made of the ashes of vegetables or bones.

Cine′rulam. A name for spodium.

Cine′tus. An epithet formerly applied to the diaphragm.

Cingula′ria. (From *cingulum,* a girdle; because it grows in that shape.) The lycopodium.

Ci′ngulum. (From *cingo,* to bind.) A girdle or belt about the loins.

Ci′ngulum mercuria′le. A mercurial girdle, called also *cingulum sapientiæ,* and *cingulum stultitiæ.* It was an invention of Rulandus's; different directions are given for making it, but the following is one of the neatest: "Take three drachms of quicksilver; shake it with two ounces of lemon-juice until the globules disappear; then separate the juice, and mix with the extinguished quicksilver, half the white of an egg; gum-dragon finely powdered, a scruple; and spread the whole on a belt of flannel."

Ci′gulum Sa′ncti Joha′nnis. A name of the artemisia.

Cinifica′tum. A name for calcinatum.

CI′NNABAR. (Pliny says the Indians call by this name a mixture of the blood of the dragon and elephant, and also many substances which resemble it in colour, particularly the minium; but it now denotes the red sulphuret of mercury.) See *Hydrargyri sulphuretum rubrum.*

Cinna′baris facti′tia. See *Hydrargyri sulphuretum rubrum.*

Cinna′baris nati′va. See *Hydrargyri sulphuretum rubrum.*

Cinna′baris Græco′rum. The sanguis draconis and cinnabar.

CINNAMO′MUM. (From *kinamon,* Arab.) Cinnamon. See *Laurus Cinnamomum.*

Cinquefoil. See *Potentilla reptans.*

Ci′on. (Κιων, a column, from κιω, to go.) The uvula was formerly so named from its pyramidal shape; also an enlargement of the uvula.

Cio′nis. (From κιων, the uvula.) A diseased enlargement and painful swelling of the uvula.

CIRCÆ′A. (From *Circe,* the enchantress; so named from the opinion, that it was used by Circe in her enchanted preparations.) Enchanter's nightshade.

1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.*

2. The name in some pharmacopœias for the *Circæa lutetiana,* which is now fallen wholly into disuse.

CIRCOCE′LE. (κιρσοκηλη: from κιρσος, *varix,* or a dilatation of a vein, and κηλη, a tumour.) *Varicocele.* A varicose distention and enlargement of the spermatic veins; and whether considered on account of the pain, or on account of the wasting of the testicle, which now and then follows, it may truly be called a disease. It is frequently mistaken for a descent of a small portion of omentum. The uneasiness which it occasions, is a kind of pain in the back, generally relieved by suspension of the scrotum. It has been resembled to a collection of earthworms. It is most frequently confined to that part of the spermatic process, which is below the opening in the abdominal tendon; and the vessels generally become rather larger as they approach the testes. There is one sure method of distinguishing between a circocele and omental hernia; place the patient in an horizontal posture, and empty the swelling by pressure upon the scrotum; then put the fingers firmly upon the upper part of the abdominal ring, and desire the patient to rise; if it is a hernia, the tumour cannot re-appear, as long as the pressure is continued at the ring: but if a circocele, the swelling returns with increased size, on account of the return of blood into the abdomen being prevented by the pressure.

Ci′rcos. (From κιρκος, a circle.) A ring. It is sometimes used for the sphincter muscle, which is round like a ring.

CIRCULA′TION. (*Circulatio;* from *circulo,* to compass about.) A vital action performed by the heart in the following manner: the blood is returned by the descending and ascending venæ cavæ into the right auricle of the heart, which, when distended, contracts and sends its blood into the right ventricle; from the right ventricle it is propelled through the pulmonary artery to circulate through, and undergo a change in, the lungs, being prevented from returning into the right auricle by the closing of the valves, which are situated there for that purpose. Having undergone this change in the lungs, it is brought to the left auricle of the heart by the four pulmonary veins, and from thence it is evacuated into the left ventricle. The left ventricle, when distended, contracts, and throws the blood through the aorta to every part of the body, to be returned by the veins into the two venæ cavæ. It is prevented from passing back from the left ventricle into the auricle by a valvular apparatus; and the pulmonary artery and aorta at their origin are also furnished with similar organs, to prevent its returning into the ventricles. — (See *Heart.*) It is by means of this important action, that every part of the body lives, becomes warm, and is nourished, the various secretions are separated, and the chyle converted into blood. In the fœtus the blood passes from the umbilical vein, partly into the vena portæ, and partly through the canalis venosus, into the ascending cava. The lungs being contracted, a very small quantity circulates through them, and the greater part flows through the foramen ovale and canalis arteriosus to the left side of the heart, and into the aorta, and is carried back by the umbilical arteries to the placenta.

Circula′tor. (From *circulo,* to compass about.) A wandering practiser in medicine. A quack. A mountebank.

Circulato′rium. (From *circulo,* to move round.) A chemical digesting vessel in which the fluid performs a circulatory motion.

CI′RCULUS. (Dim. of *circus,* a circle.) A circle or ring. Any part of the body which is round or annular, as circulus oculi. A round chemical and chirurgical instrument sometimes called abbreviatorium by the old chemists.

Ci′rculus arterio′sus i′ridis. The artery which runs round the iris and forms a circle, is so termed.

Ci′rculus quadru′plex. A bandage.

Circumcaula′lis. A name of the adnata of the eye.

CIRCUMCI′SION. (*Circumcisio,* from *circumcido,* to cut about.) The cutting off the prepuce from the glans penis; an ancient custom, still practised amongst the Jews.

CIRCUMFLE′XUS. (*Circumflexus, sc. musculus.*) *Tensor palati* of Innes. *Circumflexus palati mollis* of Albinus. *Spheno-salpingo-staphilinus, seu staphilinus externus* of Winslow. *Musculus tubæ novæ* of Valsalva. *Palato-salpingeus* of Douglas. *Pterigo-staphylinus* of Cowper, and *Petrosalpingo-staphilin* of Dumas. This muscle arises from the spinous process of the sphenoid bone, behind the foramen ovale, which transmits the third branch of the fifth pair of nerves; from the Eustachian tube, not far from its osseous part; it then runs down along the pterygoideus internus, passes over the hook of the internal plate of the pterygoid process by a round tendon, which soon spreads into a broad membrane. It is inserted into the velum pendulum palati, and the semilunar edge of the os palati, and extends as far as the suture which joins the two bones. Generally some of its posterior fibres join with the constrictor pharyngis superior, and palato-pharyngæus. Its use is to stretch the velum, to draw it downwards, and to the side towards the hook. It hath little effect upon the tube, being chiefly connected to its osseous part.

Circumgyra′tio. (From *circumgyro*, to turn round.) Circumgyration, or the turning a limb round in its socket.

Circumli′tio. (From *circumlino*, to anoint all over.) A medicine used as a general unction or liniment to the part.

Circumossa′lis. (From *circum*, about, and *os*, a bone.) Surrounding a bone as the periosteum does; or surrounded by a bone.

Ci′rcus. (*κιρκος*: from *carka*, to surround. Chald.) A circle or ring. A circular bandage, called also plinthius laqueus.

Cirne′sis. (From *κιρναω*, to mix.) An union of separate things.

Ci′rsium arve′nse. (From *κιρσος*, a vein or swelling of a vein, which this herb was supposed to heal.) The carduus hæmorrhoidalis.

Cirsoce′le. See *Circocele.*

Cirsoi′des. (From *κιρσος*, a varix, and *ειδος*, likeness.) Resembling a varix: an epithet applied by Rufus Ephesius to the upper part of the brain.

Ci′rsos. (*κιρσος*: from *κιρσοω*, to dilate.) A varix or preternatural distention of any part of a vein.

Ci′ssa. (From *κισσα*, a gluttonous bird.) A depraved appetite proceeding from previous gluttony and voracity.

CISSA′MPELOS. (From *κισσος*, ivy, and *αμπελος*, the vine.) The name of a genus of plants in the Linnæan system. Class, *Dioecia.* Order, *Monadelphia.* The wild vine with leaves like ivy.

Cissa′mpelos parei′ra. The systematic name of the *pareira brava. Pareyra. Ambutua. Butua. Overo butua.* The root of this plant, (*Cissampelos pareira; foliis peltatis cordatis emarginatis*, of Linnæus; a native of South America and the West Indies,) has no remarkable smell, but to the taste it manifests a notable sweetness of the liquorice kind, together with a considerable bitterness, and a slight roughness covered by the sweet matter. The facts adduced on the utility of the *radix pareiræ bravæ* in nephritic and calculous complaints, are principally by foreigners, and no remarkable instances of its efficacy are recorded by English practitioners.

Cissa′rus. See *Cistus Creticus.*

Cissi′num. (From *κισσος*, ivy.) The name of a plaster mentioned by Ægineta.

CI′STA, (From *κειμαι*, to lie.) A cyst.

Ciste′rna. (From *cista*, a cyst.) The fourth ventricle of the brain is so called from its cavity; also the lacteal vessels in women.

Ci′sthorus. See *Cistus Creticus.*

CI′STUS. (*Κιστος*, the derivation of which is uncertain; perhaps from *kis*, Heb.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.* The Cistus.

Cistus cre′ticus. *Cistus ladanifera. Cisthorus. Cissarus. Dorycinium.* The systematic name of the plant from which the ladanum of the shops is obtained; called also *Labdanum.* This resinous juice exudes upon the leaves of the *Cistus creticus; arborescens extipulatus, foliis spatulato-ovatis petiolatis enerviis scabris, calycinis lanceolatis;* of Linnæus, in Candia, where the inhabitants collect it by lightly rubbing the leaves with leather, and afterwards scraping it off, and forming it into irregular masses for exportation. Three sorts of ladanum have been described by authors, but only two are to be met with in the shops. The best, which is very rare, is in dark-coloured masses, of the consistence of a soft plaster, and growing still softer on being handled; the other is in long rolls, coiled up, much harder than the preceding, and not so dark. The first has commonly a small, and the last a large admixture of fine sand, without which they cannot be collected pure, independently of designed abuses: the dust blown on the plant by winds, from the loose sands among which it grows, being retained by the tenacious juice. The soft kind has an agreeable smell, and a lightly pungent bitterish taste: the hard is much weaker. Ladanum was formerly much employed internally as a pectoral and adstringent in catarrhal affections, dysenteries, and several other diseases; at present, however, it is wholly confined to external use, and is an ingredient in the stomachic plaster, *emplastrum ladani.*

Ci′stus hu′milis. A name of parnassia or white liverwort.

Ci′stus ladani′fera. See *Cistus Creticus.*

Ci'stus le'don. A name of Ledum palustre. See *Rosmarinus*.

CITE'SIUS (Citois), Francis, of Poitiers in France, who, after graduating at Montpelier in 1596, and practising a few years in his native city, went to Paris, and acquired great celebrity, being made physician to Cardinal Richelieu. He published a treatise on the Colica Pictonum, which was much esteemed, noticing its termination in paralysis of the extremities. He also gave an account of a girl who had fasted for three years; but in this case appears to have been imposed upon. In another publication he advocates repeated bleeding, as well as purging, in small-pox, and other fevers of an inflammatory type. He died in 1652, at the advanced age of 80.

Ci'tharus. (From κιθαρα, a harp.) The breast is sometimes so named from its shape.

Citra'go. (From *citrus*, a citron, so called from its citron-like smell.) *Citraria.* Melissa or baum.

CI'TRAS. (*-atis*, fœm.: from *citrus*, the lemon.) A citrate. A salt formed by the union of the citric acid, or acid of lemons, with different bases; as *citrate of ammonia*, *citrate of potash*.

Ci'trea. See *Citrus medica*.

CI'TREUM. (From *citrus*.) The citron-tree. See *Citrus medica*.

CI'TRIC A'CID. *Acidum citricum.* The acid of lemons. The citric acid may be obtained pure in concrete crystals, by the following method: Saturate boiling lemon-juice with pulverised chalk. The acid forms with lime a salt that is scarcely soluble, and the mucilaginous and extractive substances remain dissolved in the supernatant liquor; the precipitate is to be well washed with lukewarm water; it is then to be treated with as much sulphuric acid as would have been requisite to saturate the chalk, diluted in ten parts of water; and this mixture is to be boiled for a few minutes. Afterwards, it must be cooled and filtered; the sulphate of lime remains on the filter, and the liquor affords a crystallized acid by evaporation.

Citrina'tio. Complete digestion.

Citri'nula. (A dim. of *citrus*.) A small citron.

Citron. See *Citrus medica*.

Citrul, Sicilian. See *Cucurbita citrullus*.

Citru'llus. See *Cucurbita Citrullus*.

CI'TRUS. 1. The name of a genus of plants in the Linnæan system. Class, *Polyadelphia*. Order, *Icosandria*.

2. The name of the lemon. See *Citrus medica*.

Ci'trus aura'ntium. The systematic name of the orange tree. *Aurantium. Aurantium hispalense. Malus aurantia major. Malus aurantia. Aurantium vulgare. Malus aurantia vulgaris. Mala aurea. Chrysomelea. Nerantia. Martianum pomum. Poma aurantia.* Seville orange. This plant is the *Citrus aurantium petiolis alatis, foliis acuminatis*, of Linnæus. The China and Seville orange are both only varieties of the same species; the latter is specified in our pharmacopœias; and the *flowers*, *leaves*, *yellow rind* and *juice*, are made use of for different medical purposes.

The flowers, *flores naphæ*, are highly odoriferous, and are used as a perfume; they are bitter to the taste; they give their taste and smell both to water and to spirit, but most perfectly to rectified spirit of wine. The water which is distilled from these flowers, is called *aqua florum naphæ*. In distillation, they yield a small quantity of essential oil, which is called *oleum* vel *essentia neroli:* they are brought from Italy and France. Orange flowers were, at one time, said to be an useful remedy in convulsive and epileptic cases; but experience has not confirmed the virtues attributed to them.

The *leaves* have a bitterish taste, and yield, by distillation, an essential oil; indeed, by rubbing them between the fingers and the thumb, they manifest considerable fragrance. They have been applied for the same purposes as the flowers, but without success.

The *yellow rind* of the fruit, freed from the white fungous part, has a grateful aromatic flavour, and a warm, bitterish taste. Infused in boiling water, it gives out nearly all its smell and taste; cold water extracts the bitter, but very little of the flavour. In distillation, a light, fragrant, essential oil rises, without the bitter. Its qualities are those of an aromatic and bitter. It has been employed to restore the tone of the stomach, and is a very common addition to combinations of bitters, used in dyspepsia. It has likewise been given in intermittents, in doses of a drachm, twice or thrice a day. It is also much celebrated as a powerful remedy, in menorrhagia, and immoderate uterine evacuations.

The *juice* of Seville oranges is a grateful acid, which, by allaying heat, quenching thirst, promoting various excretions, and diminishing the action of the sanguiferous system, proves extremely useful in both ardent and putrid fevers; though the China orange juice, as impregnated with a larger proportion of sugar, becomes more agreeable, and may be taken in larger quantities. The Seville orange juice is particularly serviceable as an antiscorbutic, and alone will prevent or cure scurvy in the most apparently desperate circumstances. In dyspepsia, from putrid bile in the stomach, both lemon and orange juice are highly useful.

Ci'trus me'dica. The systematic name of the lemon-tree. *Limon. Limonia mala. Malus medica. Malus limonia acida. Citrea malus. Citrus.* The tree which affords the lemon, is the *Citrus medica petiolis linearibus*, of Linnæus: a native of the upper part of Asia, but cultivated in

Spain, Portugal, and France. The juice, which is much more acid than that of the orange, possesses similar virtues. It is always preferred where a strong vegetable acid is required. Saturated with the fixed vegetable alkali, it forms the citrate of potash, which is in frequent extemporaneous use in febrile diseases, and by promoting the secretions, especially that of the skin, proves of considerable service in abating the violence of fever. This medicine is also often employed to restrain vomiting. As an antiscorbutic, lemon juice has been often taken on board ships destined for long voyages; but even when well depurated of its mucilaginous parts, it is found to spoil by long keeping. To preserve it in purity for a considerable length of time, it is necessary that it should be brought to a highly concentrated state, and for this purpose it has been recommended to expose the juice to a degree of cold sufficient to congeal the aqueous and mucilaginous parts. After a crust of ice is formed, the juice is poured into another vessel; and, by repeating this process several times, the remaining juice, it is said, has been concentrated to eight times its original strength, and kept without suffering any material change for several years. Whytt found the juice of lemons to allay hysterical palpitations of the heart, after various other medicines had been experienced ineffectual; and this juice, or that of oranges, taken to the quantity of four or six ounces in a day, has sometimes been found a remedy in the jaundice. The exterior rind of the lemon is a very grateful aromatic bitter, not so hot as orange-peal, and yielding in distillation a less quantity of oil, which is extremely light, almost colourless, and generally brought from the southern parts of Europe, under the name of Essence of Lemons. The lemon-peel, though less warm, is similar in its qualities to that of the orange, and is employed with the same intentions. The pharmacopœias direct a syrup of the juice, *syrupus limonum*, and the peel enters into some vinous and aqueous bitter infusions; it is also ordered to be candied; and the essential oil is an ngredient in some formulæ.

The citron-tree is also considered as belonging to the same species, the *Citrus medica* of Linnæus. Its fruit is called *Cedromela*, which is larger and less succulent than the lemon; but in all other respects the citron and lemon trees agree. The citron juice when sweetened with sugar is called by the Italians *agro di cedro*. The *Citrus mella rosa* of Lamarck, is another variety of the *citrus medica* of Linnæus. It was produced, at first, casually, by an Italian's grafting a citron on a stock of a bergamot pear-tree; whence the fruit produced by this union participated both of the citron-tree and the pear-tree. The essence prepared from this fruit is called essence of bergamote and essentia de cedra.

Ci'tta. A voracious appetite.

Citto'sis. See *Chlorosis.*

Civet-cat. See *Zibethum.*

CIVE'TTA. (From *sebet.* Arab.) Civet, an unctuous odoriferous drug now only used by perfumers.

Clap. See *Gonorrhœa.*

CLA'RET. (*Claretum*; from *clareo*, to be clear.) A French wine, that may be given with great advantage, as a tonic and antiseptic, where red port wine disagrees with the patient; and in typhoid fevers of children and delicate females, it is far preferable, as a common drink.

Clare'tum. See *Claret.* Also a wine impregnated with spices and sugar, called by some *Vinum Hippocraticum.* A *Claretum purgatorium* composed of a vinous infusion of glass of antimony with cinnamon water and sugar, is mentioned by Schroeder.

CLARIFICA'TIO. The depuration of any thing.

Clary. A name for the *horminum.*

Cla'sis. (From κλαω, to break.) *Clasma.* A fracture.

Clau'strum. (From *claudo*, to shut.) *Cleithrum gutturis.* Any aperture which has a power of contracting itself, or closing its orifice by any means, as the passage of the throat.

Cla'ustrum virginita'tis. The hymen.

CLAUSU'RA. (From *claudo*, to shut.) An imperforation of any canal or cavity in the body. Thus *clausura uteri* is a preternatural imperforation of the uterus; *clausura tubarum Fallopiarum*, a morbid imperforation of the Fallopian tubes, mentioned by Ruysch as one cause of infecundity.

Clava'tio. (From *clava*, a club.) A sort of articulation without motion, where the parts are, as it were, driven in with a hammer, like the teeth in the sockets. See *Gomphosis.*

Clavella'tus. (From *clavus*, a wedge.) Potash was called cineres clavellati, from the little wedges, or billets, into which the wood was cut to make it.

CLA'VICLE. (Dim. of *clavis*; so called from its resemblance to an antient key.) Collar-bone. The clavicle is placed at the root of the neck, and at the upper part of the breast. It extends across, from the tip of the shoulder to the upper part of the sternum; it is a round bone, a little flattened towards the end, which joins the scapula; it is scurved like an Italic *S*, having one curve turned out towards the breast, it is useful as an arch, supporting the shoulders, preventing them from falling forwards upon the breast, and making the hands strong antagonists to each other; which, without this steadying, they could not have been.

1. The thoracic end, that next the sternum, or what may be called the inner head of the clavicle, is round and flat, or button-like; and it is received into a suitable hollow on the upper piece of the sternum.

It is not only like other joints surrounded by a capsule or purse; it is further provided with a small moveable cartilage, which, like a friction-wheel in machinery, saves the parts and facilitates the motions, and moves continually as the clavicle moves.

2. But the outward end of the clavicle is flattened, as it approaches the scapula, and the edge of that flatness is turned to the edge of the flattened acromion, so that they touch but in one single point. This outer end of the clavicle, and the corresponding point of the acromion, are flattened and covered with a crust of cartilage; but the motion here is very slight and quite insensible; they are tied firmly by strong ligaments; and we may consider this as almost a fixed point; for there is little motion of the scapula upon the clavicle: but there is much motion of the clavicle upon the breast, for the clavicle serves as a shaft, or axis, firmly tied to the scapula, upon which the scapula moves and turns, being connected with the trunk only by this single point, viz. the articulation of the clavicle with the breast-bone.

Clavi′culus. See *Clavicle.*

Clavi′cula. See *Clavicle.*

Cla′vis. (From *claudo*, to shut.) The same as clavicle.

CLA′VUS. (A nail.) The sensation resembling the driving a nail into the head. A fixed pain in the forehead, which may be covered by one's thumb, giving a sensation like as if a nail were driven into the part. When connected with hysterics, it is called *clavus hystericus.* This term is also applied to *corns,* from their resemblance to the head of a nail; and to an artificial palate, or diseased uterus.

Cla′vus hyste′ricus. See *Clavus.*

Cla′vus oculo′rum. A staphyloma, or tumour on the eyelids.

Clay. See *Alumine.*

Cleavers. See *Galium Aparine.*

CLEGHORN, George, was born near Edinburgh in 1716; and after studying in that city, went at the age of 20 to Minorca, as a regimental surgeon. During the 13 years that he spent there, he sedulously studied the natural productions of the island. In 1750, coming to London, he published his "Treatise on the Diseases of Minorca," which displays great observation and ability. He then went to Dublin, and gave lectures on anatomy with such success, that he was soon after appointed public professor; and in 1774, an honorary member of the College of Physicians there. He died in 1789.

Clei′dion. *Clidion.* The epithet of a pastil, described by Galen and Paulus Ægineta; and it is the name also of an epithem described by Aetius.

Cleido′ma. (From κλειδοω, to close.) A pastil, or troch. Also the clavicula.

Cleidomastoide′us. (From κλεις, the clavicle, and μαςοειδης, the mastoid process.) See *Sterno-cleido-mastoideus.*

Cleisa′gra. (From κλεις, the clavicle, and αγρα, a prey.) The gout in the articulation of the clavicles.

Clei′thron. (From κλειδω, to shut.) See *Claustrum.*

CLE′MATIS. (From κλημα, a tendril; so named from its climbing up trees, or any thing it can fasten upon with its tendrils.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.*

Cle′matis re′cta. The systematic name of the upright virgin's-bower. *Flammula Jovis.* *Clematis; foliis pinnatis, foliolis ovato lanceolatis integerrimis, caule erecto, floribus pentapetalis tetrapetalisque* of Linnæus. More praises have been bestowed upon the virtue which the leaves of this plant are said to possess, when exhibited internally, as antivenereal, by foreign physicians, than its trials in this country can justify. The powdered leaves are sometimes applied externally to ulcers, as an escharotic.

Cle′matis vita′lba. The systematic name of the traveller's-joy. *Vitalba. Viorna.* *Clematis arthragene* of Theophrastus. This plant is common in our hedges, and is the *Clematis; foliis pinnatis, foliolis cordatis scandentibus,* of Linnæus. Its leaves when fresh produce a warmth on the tongue, and if the chewing is continued, blisters arise. The same effect follows their being rubbed on the skin. The plant has been administered internally to cure lues venerea, scrofula, and rheumatisms. In France, the young sprouts are eaten, when boiled, as hoptops are in this country.

Clemati′tis. The same as clematis.

Cleo′nis colly′rium. The name of a collyrium described by Celsus.

Cleo′nis glu′ten. An astringent formula of myrrh, frankincense, and white of egg.

Cle′psydra. (From κλεπτω, to conceal, and υδωρ, water.) Properly, an instrument to measure time by the dropping of water through a hole, from one vessel to another; but it is used to express a chemical vessel, perforated in the same manner. It is also an instrument mentioned by Paracelsus, contrived to convey suffumigations to the uterus in hysterical cases.

CLEYER, Andrew, was born at Cassel, in the beginning of the 17th century. After studying medicine, he went as physician to Batavia, where he resided several years. He transmitted several interesting communications to the Imperial Academy, of which he had been chosen a member, particularly "An Account of Hydatids found in a Human Stomach," and "Of the Custom of the Indians of taking Opium;" also descriptions and drawings of the plants indigenous in Java, especially the moxa ginseng, and tea-plant. He likewise published, in 1680, a curious specimen of Chinese medicine.

Cli'banus. (Quasi *καλιϐανος*: from *καλυπτω*, to conceal.) A portable furnace, or still, in which the materials to be wrought on are shut up.

CLIFTON, Francis, after studying at Oxford, came to London, and was admitted Fellow of the College of Physicians, as well as of the Royal Society, about the year 1730. Two years after he published on "The State of Physic, antient and modern, with a Plan for improving it;" in which a law is proposed, to compel practitioners to send to a public institution descriptions of the several cases which come under their care. He was also author of "A plain and sure Way of practising Physic;" and translated some parts of Hippocrates into English, with notes.

Clima'cter. (From *κλιμαζω*, to proceed gradually.) The progression of the life of man. It is usually divided into periods of seven years.

Cli'max. (From *κλιμαζω*, to proceed.) A name of some antidotes, which, in regular proportion, increased or diminished the ingredients of which it was composed, e. g. ℞. *Chamædryos* ℥jjj. *Centaurii* ℥jj. *Hyperici* ℥j.

Climbing birthwort. See *Aristolochia clematitis.*

CLI'NICAL. (*Clinicus*; from *κλινη*, a bed.) Any thing concerning a bed: thus clinical lectures, notes, a clinical physician, &c.; which mean lectures given at the bedside, observations taken from patients when in bed, a physician who visits his patients in their bed, &c.

CLI'NOID. (*Clinoideus*; from *κλινη*, a bed, and *ειδος*, resemblance.) Resembling a bed. The four processes surrounding the sella turcica of the sphenoid bone are so called, of which two are anterior, and two posterior.

Clinomastoide'us. A corruption of cleidomastoideus.

Cli'ssus. A chemical term denoting mineral compound spirits; but antimony is considered as the basis clyssi. See *Clyssus.*

Clito'ridis mu'sculus. See *Erector clitoridis.*

CLI'TORIS. (From *κλειω*, to enclose, or hide; because it is hid by the labia pudendorum.) *Columella.* A small glandiform body, like a penis in miniature, and, like it, covered with a præpuce, or fore-skin. It is situated above the nymphæ, and before the opening of the urinary passage of women. Anatomy has discovered, that the clitoris is composed, like the penis, of a cavernous substance, and of a glans, which has no perforation, but is like that of the penis, exquisitely sensible. The clitoris is the principal seat of pleasure: during coition it is distended with blood, and after the venereal orgasm it becomes flaccid and falls. Instances have occurred where the clitoris was so enlarged as to enable the female to have venereal commerce with others; and, in Paris, this fact was made a public exhibition of to the faculty. Women thus formed appear to partake, in their general form, less of the female character, and are termed hermaphrodites. The clitoris in children is larger, in proportion, than in full-grown women: it often projects beyond the external labia at birth.

Clitori'smus. (From *κλειτορις*.) A morbid enlargement of the clitoris.

CLO'NIC. (From *κλονεω*, to move to and fro.) See *Convulsion.*

Clono'des. (From *κλονεω*, to agitate.) A strong unequal pulse.

Clove bark. See *Myrtus caryophyllata.*

Clove gilliflower.
Clove July flower. } See *Dianthus Caryophyllus.*
Clove pink.

Clove. See *Eugenia Caryophyllata.*

CLOWES, William, an eminent English surgeon of the 16th century, received his education under George Keble, whose skill he strongly commends. After serving for some time professionally in the navy, he settled in London, and was made surgeon to Christ's and St. Bartholomew's hospitals, and appears to have had considerable practice. In 1586 he was sent to the Low-Countries, to the assistance of the army under the Earl of Leicester; and on his return was appointed surgeon to the Queen. His works are in the English language, but evince much learning, as well as skill in his profession. The first which he published was on the lues venerea, in 1585; in which he notices the increasing frequency of that disease, and states that in five years he had cured above a thousand patients labouring under it at St. Bartholomew's hospital. But his most celebrated publication appeared three years after, on the method of treating wounds of various kinds, the result of extensive experience, sanctioned by references to the most approved writers. He appears to have possessed an enlarged understanding, and was very severe on all quacks and impostors; and he may justly be reckoned among the restorers and improvers of surgery in modern times.

CLUNE'SIA. (From *clunes*, the buttocks.) *Proctalgia.* An inflammation of the buttocks.

Clu'pea alo'sa. The Linnæan name for the shad or chad, whose flesh is by some commended as a restorative.

CLU'SIA. (So called in memory of Charles Clusius, an eminent botanist.) The name of a genus of plants in the Linnæan system. Class, *Polygamia.* Order, *Monoecia.* Balsam-tree.

CLU'TIA. (Named after Cluyt, and sometimes spelt *cluytia.*) The name of a genus of plants in the Linnæan system. Class, *Dioecia.* Order, *Gynandria.*

Clu′tia eluthe′ria. The systematic name of the tree which is by some supposed to afford the cascarilla bark.

Cluy′tia. See *Clutia.*

Cly′don. (Κλυδων.) A fluctuation and flatulency in the stomach.

Clypea′lis. (From *clypeus*, a shield.) Formed like a shield.

Cly′smus. *Clysma.* (From κλυζω, to wash.) A glyster.

Cly′ssus. *Clissus.* A term antiently used by the chemists for medicines made by the re-union of different principles, as oil, salt, and spirit, by long digestion; but it is not now practised, and the term is almost lost.

Cly′ssus antimo′nii. *Clyssus mineralis.* A weak acid of sulphur.

Cly′ster. (*Clysterium.* From κλυζω, to cleanse.) A glyster.

Cne′mia. Any part connected with the tibia.

Cnemodactylæ′us. (From κνημη, the tibia, and δακτυλος, a finger, or toe.) A muscle whose origin is in the tibia, and whose insertion is in the toes. Its office is to elevate the toes. See *Extensor longus digitorum pedis.*

Cne′sis. (From κναω, to scratch.) *Cnesma.* *Cnesmos.* A painful itching.

Cnicilæ′on. (From κνικος, cnicus, and ελαιον, oil.) Oil made of the seeds of cnicus. Its virtues are the same with those of the ricinus, but in an inferior degree.

Cni′cus. (From κναω, to scratch.) The plant used by Hippocrates by this name, is supposed to be the carthamus; but modern botanists exclude it from the species of this plant.

Cni′cus sylve′stris. The *Centaurea benedicta.*

Cni′dii co′cci.
Cni′dia gra′na. } See *Daphne Mezereum.*

Cnido′sis. (From κνιδη, the nettle.) An itching sensation, such as is perceived from the nettle. A dry ophthalmy.

Cnipo′tes. An itching.

Cni′smos. See *Cnesis.*

Cny′ma. (From κναω, to scrape, or grate.) In Hippocrates it signifies a rasure, puncture, or vellication: also the same as cnesmos, or cnesis.

COAGULA′NTIA. (From *coagulo*, to incrassate, or curdle.) Such medicines as coagulate the blood and juices flowing from it.

COA′GULABLE LYMPH. *Lympha coagulabilis.* Called also fibrin, being a principal constituent of muscular fibres. It is a component part of the blood. It may be obtained in considerable quantities, by stirring the blood about with a stick, when it adheres to its sides. In certain diseased actions it is separated from the blood, and is often found in very considerable quantities in the circumscribed cavities of the body. It has neither taste nor smell; it always possesses a white and opake colour; is of a glutinous consistence, and, if dried by a gentle heat, becomes horny. The same name has also been given to that part of the serum, which coagulates when heated, and which is of an albuminous nature. See *Albumen.*

COAGULA′TION. (*Coagulatio*: from *con*, and *ago*, to drive together.) The separation of the glutinous or viscid particles, contained in any fluid, from the more thin and not coagulable particles: thus, when milk curdles, the coagulable particles form the curd; and when acids are thrown into any fluid containing coagulable particles, they form what is called a *coagulum.*

COA′GULUM. A term applied frequently to blood and other fluids, when they assume a jelly-like consistency.

Coa′gulum alu′minis. This is made by beating the white of eggs with a little alum, until it forms a coagulum. It is recommended as an efficacious application to relaxations of the conjunctive membrane of the eye.

Coalte′rnæ fe′bres. (From *con*, and *alternus*, alternate.) Fevers mentioned by Bellini, which he describes as two fevers affecting the same patient, and the paroxysm of one approaching as that of the other subsides.

Coarcta′tio. (From *coarcto*, to straiten.) The contraction, or diminution of any thing. Applied to the pulse, it means a lessening in number.

Coarticula′tio. (From *con*, and *articulatio*, an articulation.) That sort of articulation which has manifest motion.

CO′BALT. *Cadmia metallica.* A metal that has never been found pure in nature. We meet with it almost always either in the state of an oxide, alloyed with other metals, in the form of a sulphuret, or combined with an acid.

Cobalt in the state of an oxide forms the *black cobalt ore.* This ore is found in Germany, either in powder of a black or grey colour, or in compact masses. In the last form, it exhibits at its fracture rose-coloured spots. There are several varieties of this ore.

Cobalt, alloyed with other metals, forms the *dull white cobalt ore.* In this ore, which occurs either amorphous or crystallized, cobalt is united to iron and arsenic. The colour of this ore, when fresh broken, is white or blueish-grey, sometimes with a shade of red. It has a metallic lustre. Its texture is compact. Cobalt, united to sulphur, forms the *white cobalt ore.* It is met with in masses, or crystallized in cubes, dodecahedra, and octahedra. Its colour is a tin-white, sometimes reddish-yellow. Cobalt in the state of oxide, combined with arsenic, acid forms the *red cobalt ore*, arseniate of cobalt. It is found in masses of various shapes. Its colour is red, inclining to orange.

Cobalt, when in a pure state, is of a steel-grey colour, with a tinge of red, and a fine close grain. It has a granulated fracture, and is easily broken and pulverized. Its specific weight is between 7.700 and 7.811. It requires a very intense heat for its fusion, nearly equal to that necessary to melt cast-iron. When heated in contact with the air, it oxidizes before fusion. Phosphorus renders it very fusible, and converts it into a phosphuret. It unites to sulphur with difficulty, but very well with the alkaline sulphurets by fusion. When alloyed with metals it renders them granulated, rigid, and brittle. It is attacked by the greater number of the acids, and unites with the boracic acid. Its solutions in different acids become green when heated; and from this property, it is used as an ink, which, when written with on paper, is invisible, but becomes visible when gently heated, and disappears when cold. It takes fire in oxygenated muriatic acid gas. It colours glass of a fine blue. It unites with platina, gold, iron, nickel, copper, and arsenic, by fusion; but silver, lead, bismuth, and mercury, refuse to unite with it in the dry way. In its purest state, it is not only obedient to the magnet, but, if we may trust to the accuracy of some experiments made by Kohl and Wenzel, it may even receive a magnetical attractive power.

Nitrate of potash oxidizes cobalt readily. It detonates by the blow of a hammer when mixed with oxygenated muriate of potash. It produces fine colours in porcelain, enamels, artificial gems, &c.

COBHAM WATERS. Weak saline purging waters.

CO′BRA DE CAPE′LLO. (From *cobra*, the head, or covering, Span.) *Crotalus horridus* of Linnæus. The rattlesnake; the stone out of whose head is said to be an antidote to the poison of venomous animals.

Co′cca cni′dia. See *Daphne mezereum*.

Cocca′rium. (From κοκκον, a berry.) A very small pill.

COCCINE′LLA. (Dim. from *coccus*, a berry; from its resemblance to a berry.) See *Coccus cacti*.

Cocco-ba′lsamum. The fruit of the true balsam.

Coccogni′dia. *Grana cnidia*. *Cocci cnidii*. The seeds of the *Daphne mezereum* are so termed. They are violently purgative. See *Daphne mezereum*.

Co′ccos. See *Daphne mezereum*.

Co′cculi I′ndi aroma′tici. The piper Jamaicense.

CO′CCULUS I′NDICUS. (Dim. of κοκκος, a berry.) See *Menispermum cocculus*.

Co′ccum ba′phicum. A name for chermes.

CO′CCUS. The name, in entomology, of a tribe of insects.

Co′ccus ca′cti. The systematic name of the cochineal animal. *Coccinella*. *Coccinilla*. *Ficûs Indiæ grana*. *Scarabæolus hemisphæricus*. *Cochinelifera cochinilla*. *Coccus Americanus*. *Cochinelle*. *Coccus Indicus tinctorius*. Cochineal. The female of a species of insect called *Coccus cacti*, that is found on, and collected in South America, from the *Opuntia*, or Indian fig-tree. It possesses stimulating qualities, and is ordered by the College in the *tinctura cardamomi composita*, and *tinctura cinchonæ composita*; but, most probably, merely on account of the beautiful red colour which it imparts to them.

COCCYGE′US. (*Coccygeus*, sc. *musculus*; from κοκκυξ: because it is inserted into the coccyx.) *Ischio-cocigien* of Dumas. A muscle of the os coccygis, situated within the pelvis. It arises tendinous and fleshy, from the spinous process of the ischium, and covers the inside of the sacro-ischiatic ligament; from this narrow beginning it gradually increases to form a thin fleshy belly, interspersed with tendinous fibres. It is inserted into the extremity of the os sacrum, and nearly the whole length of the os coccygis, laterally. Its use is to support and move the os coccygis forwards, and to tie it more firmly to the sacrum.

CO′CCYGIS OS. (From κοκκυξ, the cuckoo, whose bill it is said to represent.) *Cauda*. *Ossis sacri acumen*. *Coccyx*. This bone is a small appendage to the point of the sacrum, terminating this inverted column with an acute point, and found in very different conditions in the several stages of life. In the child, it is merely cartilage, and we can find no point of bone: during youth, it is ossifying into distinct bones, which continue moveable upon each other till manhood; then the separate bones gradually unite with each other, so as to form one conical bone, with bulgings and marks of the pieces of which it was originally composed; but still the last bone continues to move upon the joint of the sacrum, till, in advanced years, it is at last firmly united; later in women than in men, with whom it is often fixed at twenty or twenty-five. It is not, like the os sacrum, flat, but of a roundish form, convex without, and concave inwards; forming with the sacrum the lowest part of the pelvis behind. It has no holes like the sacrum; has no communication with the spinal canal, and transmits no nerves; but points forwards to support the lower parts of the rectum; thus it contracts the lower opening of the pelvis, so as to support effectually the rectum, bladder, and womb; and yet continues so moveable in women, as to recede in time of labour, allowing the head of the child to pass.

CO′CCYX. (Κοκκυξ, the cuckoo.) See *Coccygis os*. Also the part in which the os coccygis is placed.

Co′chia. (From κοχαω, to turn or make round.) An antient name of some officinal pills.

Co'chineal. See *Coccus cacti.*

COCHLEA. (From κοχαζω, to turn round.) A cavity of the internal ear, resembling the shell of a snail, in which are observed, the *modiolus*, or *nucleus*, extending from its basis to the *apex*, the *scala tympani*, *scala vestibuli*, and *spiral lamina.*

Co'chlea terre'stris. See *Limax.*

COCHLEA'RE. (From *cochlea*, a cockle, whose shell its bowl represents.) A spoonful. In prescriptions it is sometimes abbreviated thus, *coch.* *Cochleare magnum*, is a table-spoon; *cochleare medium*, a dessert or pap spoon; and *cochleare minimum*, a tea-spoon.

COCHLEA'RIA. (From *cochleare*, a spoon; so called from its resemblance.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliculosa.*

Cochlea'ria armora'cia. The systematic name of the horse-radish. *Raphanus rusticanus. Armoracia. Raphanus marinus. Raphanus sylvestris.* Horse-radish. The plant which affords this root is the *Cochlearia armoracia; foliis radicalibus lanceolatis crenatis, caulinis incisis*, of Linnæus. Horse-radish has long been received into the materia medica, and is also well known at our tables. "It affects the organs both of taste and smell with a quick penetrating pungency; nevertheless it contains in certain vessels a sweet juice, which sometimes exudes in little drops upon the surface. Its pungent matter is of a very volatile kind, being totally dissipated in drying, and carried off in evaporation, or distillation by water; as the pungency exhales, the sweet matter of the root becomes more sensible, though this also is, in a great measure, dissipated or destroyed. It impregnates both water and spirit, by infusion, or by distillation, very richly with its active matters. In distillation with water, it yields a small quantity of essential oil, exceedingly penetrating and pungent."

Dr. Cullen has mentioned every thing necessary to be known respecting the medicinal virtues of horse-radish, we shall therefore transcribe all that the ingenious professor has written on this subject. "The root of this plant only is employed; and it affords one of the most acrid substances of this order (*Siliquose*), and therefore proves a powerful stimulant, whether externally or internally employed. Externally, it readily inflames the skin, and proves a rubefacient that may be employed with advantage in palsy and rheumatism; and if its application be long continued, it produces blisters. Taken internally, it may be so managed as to relieve hoarseness, by acting on the fauces. Received into the stomach, it stimulates this, and promotes digestion: and therefore is properly employed as a condiment with our animal food. If it be infused in water, and a portion of this infusion be taken with a large draught of warm water, it readily proves emetic, and may either be employed by itself to excite vomiting, or to assist the operation of other emetics. Infused in water, and taken into the stomach, it proves stimulant to the nervous system, and is thereby useful in palsy, and, if employed in large quantity, it proves heating to the whole body; and thereby it proves often useful in chronic rheumatism, whether arising from scurvy or other causes. Bergius has given us a particular method of exhibiting this root, which is, by cutting it down, without bruising, into small pieces; and these, if swallowed without chewing, may be taken down in large quantities, to that of a table-spoonful. And the author alleges, that, in this way, taken in the morning for a month together, this root has been extremely useful in arthritic cases; which, however, I suppose to have been of the rheumatic kind. It would seem, in this manner employed, analogous to the use of unbruised mustard-seed; it gives out in the stomach its subtile volatile parts, that stimulate considerably without inflaming. The matter of horse-radish, like the same matter of the other siliquose plants carried into the blood-vessels, passes readily into the kidneys, and proves a powerful diuretic, and is therefore useful in dropsy; and we need not say, that, in this manner, by promoting both urine and perspiration, it has been long known as one of the most powerful antiscorbutics."

Cochlea'ria horte'nsis. Lemon scurvy-grass.

Cochlea'ria officina'lis. The systematic name of the lemon scurvy-grass. *Cochlearia hortensis.* This indigenous plant, *Cochlearia officinalis; foliis radicalibus cordato subrotundis, caulinis oblongis subsinuatis*, of Linnæus, is cultivated in gardens for its medicinal qualities. Its expressed juice has been long considered as the most effectual of the scorbutic plants.

Cocho'ne. (From κοχαω, to turn round.) Galen explains this to be the juncture of the ischium, near the seat or breech; whence, says he, all the adjacent parts about the seat are called by the same name. Hesychius says, that *cochone* is the part of the spine which is adjacent to the os sacrum.

COCKBURN, William, was born in the latter part of the 17th century. After being some years physician to the navy, he settled in London; and soon distinguished himself so much, that he was admitted into the College, as well as the Royal Society, and made physician to King William. He published a "Treatise on Sea Diseases," which was often reprinted, and translated into French and German. He referred the scurvy principally to the diet of seamen, and considered fresh provisions as the chief remedy for it. He wrote also on Alvine Fluxes, on Gonorrhœa, (which he contends may exist independent of syphilis,) and on the Human Œconomy; which latter publication was much noticed at the time, but is since superseded by more accurate treatises.

CO′COS. (So called from the Portuguese *coco*, or *coquen*, the three holes at the end of the cocoa-nut shell, giving it the resemblance of a monkey's head.) The name of a genus of plants in the Linnæan system. Class, *Monoecia*. Order, *Hexandria*. The cocoa-nut tree.

Co′cos nucife′ra. The systematic name of the plant, whose fruit is the cocoa-nut.

Co′cos butyra′cea. The systematic name of the plant which affords the palm oil, *Oleum palmæ*, which is produced chiefly from the fruit of the *Cocos butyracea; inermis, frondibus pennatis; foliolis simplicibus*, of Linnæus, by bruising and dissolving the kernels of the fruit in water, without the aid of heat, by which the oil is separated, and rises to the surface, and on being washed two or three times, is rendered fit for use. When brought into this country, it is of the consistence of an ointment, and of an orange-yellow colour, with little taste, and of a strong, though not disagreeable smell. Its use is confined to external applications in pains, tumours, and sprains; but it appears to possess very little, if any, advantage over other bland oils.

Co′ction. (From *coquo*, to boil.) Concoction. Digestion. In a medical sense, signifies that alteration, whatever it be, or however occasioned, which is made in the crude matter of a distemper, whereby it is either fitted for a discharge, or rendered harmless to the body. This is often brought about by nature; that is, by the vis vitæ, or the disposition or natural tendency of the matter itself, or else by proper remedies, which may so alter its bulk, figure, cohesion, or give it a particular determination, so as to prevent any farther ill effects, or drive it quite out of the body. And, that time of a disease wherein this action is performing, is called its state of coction.

Cocu′stu. The name for courbaril.

Codoce′le. (From κωδια, a bulb, and κηλη, a tumour.) A bubo.

Coda′ga pala. See *Nerium antidysentericum*.

Cœca′lis. (From *cœcum*, the blind gut, through which it runs.) A vein, being a branch from the concave side of the vena mesaraica.

Cœ′la. (From κοιλος, hollow.) The hollow pits above, and sometimes below the eyes. The hollow parts at the bottom of the feet.

Cœ′lia. (From κοιλος, hollow.) A cavity in any part of the body. The belly. The womb.

CŒ′LIAC A′RTERY. (*Cœliacus*, belonging to the belly; from κοιλια, the belly.) *Arteria cœliaca*. The first branch given off from the aorta in the cavity of the abdomen. It sends branches to the diaphragm, stomach, liver, pylorus, duodenum, omentum, and spleen.

CŒ′LIAC PA′SSION. (*Cœliacus*, belonging to the belly; from κοιλια, the belly.) *Cœlica chylosa*. *Cœlica lactea*. There are very great differences among physicians concerning the nature of this disease. Sauvages says it is a chronic flux, in which the aliment is discharged half digested. Dr. Cullen considers it as a species of diarrhœa, and mentions it in his third and fourth species, under the terms mucosa, chylosa, lactea; making the purulenta only symptomatic. See *Diarrhœa*. It is attended with great pains in the stomach, resembling the pricking of pins; rumbling and flatus in the intestines; white stools, because deprived of bile; while the patient becomes weak and lean.

Cœlo′ma. (From κοιλος, hollow.) An ulcer in the tunica cornea of the eye.

Cœlosto′mia. (From κοιλος, hollow, and ϛομα, the mouth.) A defect in speaking, when a person's speech is obscured by sounding as if his voice proceeded from a cavern.

Cœnolo′gia. (From κοινος, common, and λογος, discourse.) A consultation, or common consideration of a disease, by two or more physicians.

Cœno′tes. (From κοινος, common.) The physicians of the methodic sect asserted that all diseases arose from relaxation, stricture, or a mixture of both. These were called *cœnotes*, viz. what diseases have in common.

Cœru′leus la′pis. The sulphate of copper. See *Cupri sulphas*.

Cœ′te. (From κειμαι, to lie down.) A bed, or couch, for a sick person.

CO′FFEA. (From *kofuah*, a mixing together, Hebr.; so called from the pleasant potation which is made from its berry: others assert that the true name is *Caffè*, from *Caffa*, a province in South America, where the tree grows spontaneously in great abundance.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*. The coffee-tree.

Co′ffea Ara′bica. The plant which affords coffee. *Jasminum Arabicum*. *Choava*. Coffee is the seeds of the *Coffea; floribus quinquefidis, dispermis*, of Linnæus. The coffee-tree is cultivated in Arabia, Persia, the East Indies, the Isle of Bourbon, and several parts of America. Good Turkey coffee is by far the most salutary of all liquors drunk at meal-time. It possesses nervine and adstringent qualities, and may be drunk with advantage at all times, except when there is bile in the stomach. It is said to be a good antidote against an overdose of opium, and to relieve obstinate spasmodic asthmas. For the latter purpose, the coffee ought to be of the best Mocco, newly burnt, and made very strong, immediately after grinding it. Sir John Pringle commonly ordered one ounce for a dose; which is to be repeated fresh, after the interval of a quarter or half an hour; and which he directed to be taken without milk or sugar.

If coffee be drunk warm within an hour after dinner it is of singular use to those who have head-ache, from weakness in the stomach, contracted by sedentary habits, close attention, or accidental drunkenness. It is of service when the digestion is weak; and persons afflicted with the sick head-ache are much benefited by its use, in some instances, though this effect is by no means uniform. Coffee is often imitated by roasting rye with a few almonds.

CO'GAN, William, was born in Somersetshire, about the middle of the 16th century. He studied, and took the degree of bachelor in medicine at Oxford; soon after which he was appointed master of the school at Manchester, where he also practised in his profession till his death in 1607. He published a curious book, abounding in classical quotations, entitled "The Haven of Health," in which he strongly recommends temperance and exercise. There is added an account of the sweating sickness; and of a remarkable disorder, which prevailed at Oxford in July and August 1575, before he left it, by which he states that in thirty-seven days, "there died 510 persons, all men and no women."

COHE'SION. (From *con*, and *hæreo*, to stick together.) *Vis cohæsionis*. *Vis adhæsionis*. *Vis attractionis*. That force in the particles of matter whereby they are connected in such a way that they resist any attempt towards their removal or separation. It is a species of attraction. See *Attraction*.

Cohoba'tion. (A term invented by Paracelsus.) *Cohobatio*. *Cohobium*. *Cohoph*. The antient chemists use this term to signify the distillation of a fluid poured afresh upon a substance of the same kind as that upon which it was before distilled, and repeating this operation several times, to make it more efficacious. For this purpose, the vessel called pelican was employed.

Co'hol. (*Cohol*, Heb.) Castellus says this word is used in Avicenna, to express dry collyria for the eyes, in fine powder.

Coi'lima. (From κοιλια, the bowels.) A sudden swelling of the belly from wind.

Coilosto'mia. (From κοιλος, hollow, and ϛομα, the mouth.) A defect of speaking, from the palate, or through the nose.

Coindica'ntia. (From *con*, and *indico*, to indicate.) Signs, or symptoms, are called coindicant, when, besides the usual incidental appearances, there occur others, as age, habit, season, &c.

Coi'ra. A name for catechu.

COITER, Volcher, was born at Groningen in 1534. After studying at the different universities in Italy, he attended as physician to the French army during one campaign, that he might have more opportunity for investigating human anatomy. He then settled at Nuremberg, where he continued till his death in 1576. He made considerable improvements in anatomy and surgery. He found that the brain had a motion communicated to it by the arteries; and that in some animals the organ might be removed without destroying life. He first described the corpora lutea in the ovaria; and noticed the order in which the parts of the chick are evolved. He described the frontal sinuses, and the organ of hearing, more accurately than any preceding author. He pointed out two muscles which depress the eye-brows, and two which perform the same office to the lips. He observed, that injuries to the brain are more dangerous when the dura mater remains entire; and therefore he boldly divided that membrane. He was accustomed also to pare down fungi arising from the brain. He published good plates of the cartilages, of the fœtal skeleton, and of those of various animals, &c.

CO'ITUS. (From *coeo*, to go together.) The conjunction of the male and female in the act of procreation.

Co'la. (From κωλον, a joint.) The joints.

Colato'ria la'ctea. Astruc says they were formerly called glands, and are situated in the third and internal tunic of the uterus, and, that they are vesiculo-vascular bodies.

Colato'rium. (From *colo*, to strain.) A strainer of any kind.

Colatu'ra. (From *colo*, to strain.) A filtered or strained liquor.

COLBATCH, John, was born in the latter part of the 17th century. He practised in London, first as a surgeon and apothecary, afterwards as a physician, and had considerable repute. He published several works: the first was "A New Light of Chirurgery," condemning the use of tents, and the injection of acrid substances into wounds; then a treatise, in which most diseases are ascribed to alkalescency, and acids strongly recommended; this in a subsequent publication he applied particularly to the gout; lastly, he highly extolled the misletoe as a remedy for epilepsy and other nervous diseases.

Colcaquahui'tl. An American plant, commended in palsies and uterine disorders, according to Ray.

COLCESTRE'NSIS A'QUA. Colchester water. This mineral water is of the bitter purging kind, similar to that of Epsom, but not so strong.

CO'LCHICUM. (From *Colchis*, a city of Armenia, where this plant is supposed to have been common.) 1. The name of a genus of plants in the Linnæan system. Class, *Hexandria*. Order, *Trigynia*. Meadow-saffron.

2. The pharmacopœial name of the meadow-saffron. See *Colchicum autumnale.*

Co'lchicum autumna'le. The systematic name of the common meadow-saffron. *Colchicum; foliis planis lanceolatis erectis,* of Linnæus. A native of England. The sensible qualities of the fresh root are very various, according to the place of growth and season of the year. In autumn it is almost inert, but in the beginning of summer highly acrid: hence some have found it to be a corrosive poison, whilst others have eaten it in considerable quantity, without experiencing any effect. When it is possessed of acrimony, this is of the same nature with that of garlic and some other plants, and is entirely destroyed by drying. The German physicians have celebrated its virtues as a diuretic, in hydrothorax and other dropsies; and in France it continues to be a favourite remedy; but it is, nevertheless, in this country unsuccessful, or at best a very uncertain remedy. The expressed juice is used, in Alsace, to destroy vermin in the heads of children. The officinal preparations of colchicum are, Syr. Colch. Autum. Edin. Pharm. The oxymel colchici of the former London pharmacopœia is now omitted, and the acetum colchici ordered in its room; as the honey may easily be added extemporaneously, if it be thought requisite. The following is the formula of the present London Pharm. for preparing the acetum colchici, or vinegar of meadow-saffron: "Take of fresh meadow-saffron root sliced, an ounce; acetic acid, a pint; proof spirit, a fluid-ounce. Macerate the meadow-saffron root in the acid, in a covered glass vessel, for twenty-four hours; then press out the liquor and set it by, that the feculencies may subside; lastly, add the spirit to the clear liquor." The dose is from ʒss to ʒjss.

Co'lchicum illy'ricum. The plant supposed to afford the *hermodactyls.* See *Hermodactylus.*

Co'lchicum Zeyla'nicum. See *Zedoaria.*

Co'lcothar vitri'oli. *Chalcitis.* The remains of calcined martial vitriol.

COLD. A privation of heat. It is nothing positive, but somewhat of the negative kind. The human body contains within itself, as long as it is living, a principle of warmth: if any other body, being in contact with it, abstracts the heat with unusual rapidity, it is said to be cold; but if it carries off the heat more slowly than usual, or even communicates heat to our body, it is said to be hot.

A cold is a popular name also for a catarrh. See *Catarrhus.*

COLD AFFUSION. A process formerly sometimes practised by physicians, but lately introduced by Dr. Currie, of Liverpool, in the treatment of typhus fever, and which appears to possess an uniformity of success, which we look for in vain in almost any other branch of medical practice. The remedy consists merely in placing the patient in a bathing-tub, or other convenient vessel, and pouring a pailful of cold water upon his body; after which he is wiped dry, and again put to bed. It should be noted,

First, That it is the *low contagious fever* in which the cold affusion is to be employed. The first symptoms of which are a dull head-ache, with restlessness and shivering; pains in the back, and all over the body, the tongue foul, with great prostration of strength; the head-ache becoming more acute, the heat of the body, by the thermometer, 102° to 105° or more; general restlessness, increasing to delirium, particularly in the night.

Secondly, That it is *in the early stage of the disease* we must employ the remedy; and generally *in the state of the greatest heat and exacerbation.*

Thirdly, It is *affusion, not immersion,* that must be employed.

Since the first publication of Dr. Currie's work, the practice of affusion has been extended throughout England; and its efficacy has been established in some stages of the disease, from which the author had originally proscribed the practice of it. One of the cautionary injunctions which had been given for the affusion of cold water in fever, was, *never to employ it in cases where the patient had a sense of chilliness upon him,* even if the thermometer, applied to the trunk of the body, indicated a preternatural degree of heat. In his last edition of Reports, however, Dr. Currie has given the particulars of a case of this description, in which the cold affusion was so managed as to produce a successful event.

In fevers *arising from, or accompanied by, topical inflammation,* his experience does not justify the use of cold affusion; though, in a great variety of these cases, the warm affusion may be used with advantage. "And," says he, "though I have used the cold affusion in some instances, so late as the twelfth or fourteenth day of contagious fever, with safety and success, yet it can only be employed, at this advanced period, in the instances in which the heat keeps up steadily above the natural standard, and the respiration continues free. In such cases, I have seen it appease agitation and restlessness, dissipate delirium, and, as it were, snatch the patient from impending dissolution. But it is in the *early stages* of fever (let me again repeat) that it ought always to be employed, if possible; and where, without any regard to the heat of the patient, it is had recourse to in the last stage of fever, after every other remedy has failed, and the case appears desperate, (of which I have heard several instances,) can it appear surprising that the issue should sometimes be unfavourable?"

Numerous communications from various practitioners, in the West and East Indies, in Egypt and America, also show the efficacy of affusion in the raging fevers of hot countries.

COLE, William, studied at Oxford, and took his degree there in 1666. After practising some time at Bristol, he came to London, and distinguished himself by several publications on physiology and medicine, which however are too theoretical. The principal are on animal secretion, on apoplexy, on the cause of fever, on insensible perspiration, &c. He published also a case of epilepsy, cured, in his opinion, by the misletoe.

Co′les. (From καυλος, a stalk.) *Colis.* The penis.

Colewort. See *Brassica.*

Co′li de′xtrum ligame′ntum. Where the mesentery changes its name for that of mesocolon, (near the extremity of the ileum,) the particular lamina, which is turned to the right side, forms a small transverse fold, which is thus named.

Co′li sini′strum ligame′ntum. It is a contraction of the mesocolon, a little below the left kidney.

CO′LICA. (From κωλον, colon, the name of one of the intestines.) The colic. The appellation of colic is commonly given to all pains in the abdomen, almost indiscriminately; but, from the different causes and circumstances of this disorder, it is differently denominated. When the pain is accompanied with a vomiting of bile, or with obstinate costiveness, it is called a *bilious colic:* if flatus causes the pain, that is, if attended with temporary distention, relieved by the discharge of wind, it takes the name of *flatulent* or *windy colic;* when accompanied with heat and inflammation, it takes the name of *inflammatory colic*, or *enteritis.* When this disease arises to a violent height, and is attended with obstinate costiveness, and an evacuation of fæces by the mouth, it is called *passio iliaca*, or iliac passion.

Dr. Cullen places this genus of disease in the class *neuroses*, and order *spasmi;* and defines it pain of the abdomen, particularly round the umbilicus, attended with vomiting and costiveness. He enumerates seven species.

1. *Colica spasmodica*, with retraction of the navel, and spasm of the muscles of the belly.

2. *Colica pictonum.* This is called from the place where it is endemial, the Poictou, the Surinam, the Devonshire colic; from its victims, the plumbers' and the painters' colic; from its symptoms, the dry belly-ache, the nervous and spasmodic colic. It has been attributed to the poison of lead, and this is undoubtedly the cause, when it occurs to glaziers, painters, and those employed in lead works; but, though this is one, it is by no means the only cause. In Devonshire, it certainly more often arises from the early cyder, made of harsh, unripe fruit, and in the West Indies from new rum. The characteristics of this disease are, obstinate costiveness, with a vomiting of an acrid or porraceous bile, pains about the region of the navel, shooting from thence to each side with excessive violence, strong convulsive spasms in the intestines, and a tendency to a paralysis of the extremities. It is occasioned by a long-continued costiveness; by an accumulation of acrid bile; by cold applied either to the extremities, or to the belly itself; by a free use of unripe fruits, and by great irregularity in the mode of living. From its occurring frequently in Devonshire, and other cyder counties, it has been supposed to arise from an impregnation of lead received into the stomach; but this seems to be a mistake, as it is a very prevalent disease in the West Indies likewise, where no cyder is made, and where there is only a very small quantity of lead in the mills employed to extract the juice from the sugar-canes. One or other of the causes just enumerated, may justly be said always to give rise to this species of colic.

The disease comes on gradually, with a pain at the pit of the stomach, extending downwards to the intestines, accompanied with eructations, slight sickness at the stomach, thirst, anxiety, obstinate costiveness, and a quick contracted pulse. After a short time, the pains increase considerably in violence; the whole region of the belly is highly painful to the touch; the muscles of the abdomen are contracted into hard irregular knots or lumps; the intestines themselves exhibit symptoms of violent spasm, insomuch that a glyster can hardly be injected, from the powerful contraction of the sphincter ani; and there is constant restlessness, with a frequent vomiting of an acrid or porraceous matter, but more particularly after taking either food or medicine.

Upon a farther increase of the symptoms, or their not being quickly alleviated, the spasms become more frequent, as well as violent; the costiveness proves invincible, and an inflammation of the intestines ensues, which soon destroys the patient by gangrene. In an advanced stage of the disease, it is no uncommon occurrence for dysuria to take place, in a very high degree.

The dry belly-ache is always attended with some degree of danger; but which is ever in proportion to the violence of the symptoms, and the duration of the disease. Even when it does not prove fatal, it is too apt to terminate in palsy, and to leave behind it contractions of the hands and feet, with an inability in their muscles to perform their office; and in this miserable state of existence, the patient lingers out many wretched years.

Dissections of this disease usually show the same morbid appearances as in common colic, only in a much higher degree; namely, irregular contractions and distention of the intestines, often with marks of inflammation.

3. *Colica stercorea*, which happens from obstinate and long-continued costiveness.

4. *Colica accidentalis*, called also cholera sicca, from acrid undigested matters.

5. *Colica meconialis*, in infants, from a retention of meconium.

6. *Colica callosa*, with a sensation of a stricture in some part of the colon, and frequently of previous flatulence, gradually passing off; the habit costive, or fæces liquid, and in small quantity.

7. *Colica calculosa*, from calculi formed in the intestines, attended with a fixed hardness in some part of the abdomen. It is distinguished by the previous discharge of calculi.

8. *Colica flatulenta* may be added to these species. It is distinguished by a sudden fulness, with pain and constipation, relieved by a discharge of wind from the mouth, or anus.

The colic is distinguished from inflammation of the intestines by the pain being *wringing*, and not of a burning kind; by the *spasmodic contraction* of the abdominal muscles; by the *absence* or *trifling* degree of fever; by the *state* of the pulse, and by the *diminution* of pain upon pressure, which increases it in enteritis.

The flatulent and inflammatory colic are thus distinguished from each other: — In the flatulent colic, the pain comes on by fits, flies from one part of the bowels to another, and is much abated by a discharge of wind, either upwards or downwards; but in the inflammatory colic the pain remains equable, and fixed and settled in one spot; the vomitings are severe, and frequently bilious; the belly is obstinately bound, and the pulse quick and feverish.

The colic should be distinguished from a fit of the gravel; stones passing through the ureters; rheumatic pains in the muscles of the belly; a beginning dysentery; the blind piles; and from a stone passing through the gall-duct. Gravel in the kidneys produces often colic pains, not easily distinguishable; but when stones pass through the ureters, the testicle on that side is often retracted, the leg is benumbed, a pain shoots down the inside of the thigh; symptoms occasioned by the stone passing through the ureter over the spermatic chord, or the sacro-sciatic nerve. Rheumatic pains in the muscles of the belly rarely affect so accurately the umbilical region, but dart in various directions, to the chest, or to the pelvis, and are attended with soreness, not confined to the abdomen. A beginning dysentery differs little from colic. The pain from the blind piles is confined to the rectum: and that from a stone in the gall-duct, is felt in the pit of the stomach, occasionally shooting through the body to the back.

The treatment of this disease must vary according to its form: but the leading indications are, 1. To obviate inflammation. 2. To relax the spasm, and relieve the pain attending. 3. To remove local irritation, especially by evacuating the alvine contents. 4. By various prophylactic measures to guard against a relapse. — 1. The chief danger arising from inflammation supervening, it may be prudent to anticipate this, where the habit and strength will allow, by taking away an adequate quantity of blood from the arm, or more generally by leeches to the abdomen, but especially where any sign of inflammation appears, this plan becomes necessary, followed by a hot bath, or fomentations, a blister to the abdomen, &c. as detailed under *enteritis*. 2. The means already noticed may serve to relax spasm also, though not requisite in slight cases, besides the various antispasmodic remedies, as æther, assafœtida, &c.; likewise aromatics, or spirituous liquors, will often by their stimulus on the stomach afford relief in flatulent colic, though their use is sometimes hurtful; but by far the most powerful remedy is opium in adequate quantity, which is best regulated in severe attacks, by giving divided doses at short intervals till ease is obtained. 3. Local irritation may sometimes be relieved by chemical remedies, as antacids, particularly magnesia, &c.; but for the most part the evacuation of the intestines should be attempted, when the pain is relieved. To prepare for this calomel, may be given in conjunction with the opium, and when the patient has been some time at ease, this may be followed up by castor oil, sulphate of magnesia, or other mild laxative, repeated till the desired effect be produced; or where these do not presently operate, some more active cathartics, as the compound extract of colocynth, jalap, &c. should be tried. If the stomach be irritable, the effervescing saline draught may enable it to retain them; and clysters will often assist the articles taken by the mouth, particularly where there are indurated fæces. In very obstinate cases, an injection of tobacco smoke has often succeeded in procuring evacuations: also putting the feet for some time into cold water, or pouring this on the abdomen and lower extremities. Sometimes it has been necessary to remove fœcal accumulations mechanically per anum. 4. The great liability of this complaint to return renders it necessary for some time after carefully to regulate the diet, to attend to the state of the bowels, as well as of the liver, to avoid the several causes, especially cold, maintaining the function of the skin by suitable clothing, exercise, &c. In the colica pictonum, stimulant aperients, as the peruvian balsam, mustard, &c. steadily persisted in, will mostly effect a complete cure; and mercury has been by some highly extolled; by others, astringents, especially alum, though certainly somewhat objectionable, as liable to confine the bowels.

Co′lica accidenta′lis. Colic from crudities in the bowels.

Co′lica arte′ria sini′stra. The lower mesenteric artery.

Co′lica arte′ria supe′rior. The upper mesenteric artery.

Co′lica bilio′sa. Colic from excess of bile.

Co′lica calculo′sa. Colic from stony matters in the intestines.

Co′lica callo′sa. Colic from hardened and obstinate strictures.

Co′lica Damnonio′rum. Colic peculiar to Devonshire. See *Colica.*

Co′lica febrico′sa. Colic with fever.

Co′lica flatule′nta. Colic from wind.

Co′lica gravida′rum. Colic in pregnant women.

Co′lica hyste′rica. Hysteric colic.

Co′lica lacta′ntium. Colic peculiar to nurses.

Co′lica Lappo′nica. Colic peculiar to Laplanders.

Co′lica meconia′lis. Colic from meconium in infants.

Co′lica mesente′rica. Colic from diseased mesentery.

Co′lica nervo′sa. The nervous colic.

Co′lica pancrea′tica. Colic from diseased pancreas.

Co′lica phlogi′stica. Colic with inflammation.

Co′lica pi′ctonum. See *Colica.*

Co′lica pituito′sa. The spasmodic colic.

Co′lica pletho′rica. The inflammatory colic.

Co′lica plumbario′rum. The colic of lead-workers.

Co′lica pulsa′tilis. The inflammatory colic.

Co′lica saturni′na. The Devonshire colic. See *Colica.*

Co′lica scirrho′sa. The colic from scirrhous tumours.

Co′lica spasmo′dica. The spasmodic colic.

Co′lica sterco′rea. Colic from retained fæces.

Co′lica ve′na. A branch of the upper mesenteric vein.

Co′lica ve′na re′cta. The vein of the colon.

Co′lica vermino′sa. The colic from worms.

Co′lice. The colic.

Colifo′rmis. (From *cola*, a strainer, and *forma*, a likeness; so called from its having many perforations, like a strainer.) *Coliforme os.* A name formerly given to the os cribrosum.

Coli′phium. (From *κωλον*, a limb, and *ιφι*, strongly.) A kind of bread given to wrestlers. It was made of flour and bran together, and was thought to make men athletic.

Co′lis. The same as coles.

Colla′psus. (From *collabor*, to shrink down.) A wasting or shrinking of the body, or strength.

Collate′nna. A specific vulnerary.

Collatera′les. So Spigelius calls the erectores penis, from their collateral order of fibres.

Colle′tica. (From *κολλὰ*, glue.) Conglutinating medicines.

Colli′ciæ. (From *colligo*, to collect.) The union of the ducts, which convey the humours of the eyes from the puncta lachrymalia to the cavity of the nose.

Colli′culum. (Dim. of *collis*, a hill.) The nympha, or prominency, without the vagina of women.

Colliga′men. (From *colligo*, to tie together.) A ligament.

COLLINS, Samuel, was born in the early part of the 17th century. After studying at Cambridge and Oxford, he went to the Russian court as physician, and continued there nine years. On his return, he was made Fellow of the College of Physicians in London. He afterwards published a history of the Court of Russia, and in 1685 a system of anatomy, treating of the body of man, animals, and plants, with numerous plates. The comparative anatomy, to which Dr. Tyson greatly contributed, was much admired, though now superseded by other publications.

Colliquame′ntum. (From *colliqueo*, to melt.) A term first made use of by Dr. Harvey, in his application of it to the first rudiments of an embryo in generation.

COLLI′QUATIVE. (From *colliqueo*, to melt.) Any excessive evacuation is so called which melts down, as it were, the strength of the body: hence colliquative perspiration, colliquative diarrhœa, &c.

Colli′sio. (From *collido*, to beat together.) A contusion.

Co′llix. (From *κολον*, food.) A troch, or lozenge.

Collobo′ma. (From *κολλαω*, to glue together.) The growing together of the eye-lids.

Collo′des. (From *κολλα*, glue.) Glutinous.

Co′llum. (From *κωλον*, a member, as being one of the chief; or dim. of *columna*, as being the pillar and support of the head.) The neck.

COLLUTO′RIUM. (From *colluo*, to wash.) A gargarism or wash for the mouth.

COLLU′VIES. (From *colluo*, to cleanse.) Filth. Excrement. The discharge from an old ulcer.

Co′llyris. (*Κολλυρις*, a little round cake;

so called from its likeness to a cake.) A bump, or knob, which rises after a blow.

COLLY′RIUM. (From κωλυω, to check, and ρους, a defluxion; because it stops the defluxion.) Any medicine was formerly so called which was applied with that intention. The term is now only given to fluid applications for the eyes, or eye-waters.

Colobo′ma. (From κολλαω, to glue together.) The growing together of the eye-lids: also the want of a particular member of the body.

Colobo′mata. In Celsus this word is expressed by curta. Both the words signify a deficiency in some part of the body, particularly the ears, lips, or alæ of the nostrils.

Coloca′sia. (From κολον, food, and καζω, to adorn; so called from its use as a food, and the custom of wearing its flowers in wreaths.) The faba Ægyptia.

COLOCY′NTHIS. (From κωλον, the colon, and κινεω, to move; because of its great purging powers.) See *Cucumis colocynthis.*

Colo′mbo. See *Calumba.*

CO′LON. (*Colon, li,* neut. Κωλον, quasi κοιλον; from κοιλος, hollow; so called from its capacity, or from its generally being found empty, and full of wind in dissection.) The greater portion of the large intestine is so called. It proceeds towards the liver, by the name of the *ascending portion of the colon;* and having reached the liver, forms a *transverse arch* across to the other side. The colon then descends, forming what is termed its *sigmoid flexure,* into the pelvis, where the gut is called rectum. See *Intestines.*

Colopho′nia. (Κολοφωνια, the city from whence it was first brought.) *Resina nigra.* The black resin which remains in the retort, after distilling the common resin with a strong fire. Paracelsus seems to mean by it what is now prescribed by the name of *terebinthina cocta:* but the antients, and particularly Galen, seemed to understand by it a soft kind of mastich, from *Chio,* probably the same as our *Chio* turpentine.

Colo′strum. (From κολον, food, or κολλωμαι, to agglutinate; so called, either because it is the first food of the young, or from its being at that time peculiarly glutinous.) The first milk in the breasts after delivery, according to some authors; but Bartholine applies it to an emulsion made by the solution of turpentine with the yolk of an egg.

COLOT, Germain, a French surgeon of the 15th century, appears to have been the first of the profession who practised Lithotomy, that operation having been previously in the hands of itinerant practitioners. He acquired great celebrity by his skill, and was much in favour with Lewis IX., who granted him a pension. Several of his descendants in succession enjoyed great reputation as lithotomists.

COLOT, Francis, the last of them, left a treatise, published in 1727, describing the method of operating with the greater apparatus, the invention whereof he ascribes to John de Romanis, an Italian physician, about two centuries before. But this has long been superseded by the lesser apparatus, which Mr. Sharp attributes to another French surgeon, Mons. Foubert.

Colotoi′des. (From κωλωτης, a lizard, and ειδος, likeness.) Variegated like the skin of a lizard. Hippocrates applied it to the excrements.

Coloqui′ntida. See *Cucumis colocynthis.*

Colpoce′le. (From κολπος, the vagina, and κηλη, a tumour.) A hernia forced into the vagina.

Colpopto′sis. (From κολπος, the vagina, and ϖιπτω, to fall down.) A bearing down of the vagina.

Colt's-foot. See *Tussilago.*

CO′LUBER. (*Quod colit umbram,* because it delightest in the shade.) A genus of animals in the Linnæan arrangement, of which there are many species.

Co′luber be′rus. The systematic name of the viper. *Vipera.* This viviparous reptile, *Coluber berus* of Linnæus, possesses the power of forming a poisonous fluid in little bags near its teeth. The flesh is perfectly innocent, and often taken by the common people against the king's evil, and a variety of disorders of the skin. Experience evinces it to be an inefficacious substance.

Colubri′na virginia′na. See *Aristolochia Serpentaria.*

Colubri′num li′gnum. (*Colubrinus,* from *coluber;* so called from the snake-like contortions of its roots.) This species of snake-wood is brought from America. It is solid, ponderous, acrid, extremely bitter, and inodorous; its bark is of a ferruginous colour, covered with cineritious spots.

Co′lumbine. See *Aquilegia.*

Colu′mba. See *Calumba.*

Columbo′be. See *Calumba.*

Colume′lla. (Dim. of *columna,* a column.) See *Uvula,* and *Clitoris.*

COLU′MBIUM. Mr. Hatchett describes the ore from which this metal is obtained, as being of a dark brownish-grey externally, and more inclining to an iron-grey internally; the longitudinal fracture, he found, lamellated; and the cross fracture had a fine grain. Its lustre was vitreous, slightly inclining, in some parts, to metallic; moderately hard and very brittle. The colour of the streak, or powder, was dark chocolate-brown. The particles were not obedient to the magnet. Its specific gravity, at a temperature of 65° Fahr., Mr. Hatchett found to be 5.918.

A series of accurate experiments, made by its discoverer, prove that this ore consists of iron, combined with a new metallic acid, which constitutes more than three-fourths of the whole.

The smallness of the quantity Mr. Hatchett had to operate upon, has hitherto prevented us from seeing the metal in its metallic state; but the accuracy with which the properties of its acid have been investigated, leave no doubt of its being different from any of the acidifiable metals hitherto known.

Columella'ris. (From *columella*, a little column.) A name of the dens caninus.

COLU'MNA. A column, or pillar. Many parts of the body, which in their shape or office resemble columns, are so named; as columnæ carneæ, &c.

Colu'mna na'si. The lowest and fleshy part of the nose, which forms a part of the septum.

Colu'mna o'ris. A name for the uvula.

Colu'mnæ ca'rneæ. Columnæ cordis. See *Heart.*

Colu'rium. (*Παρα το κολλᾳν τον ρουν:* because it prevents a defluxion.) A tent to thrust into a sore, to prevent a defluxion of humours.

CO'MA. (From *κω*, or *κεω*, to lie down.) A propensity to sleep. This word antiently meant any total suppression of the powers of sense; but now it means a lethargic drowsiness. The coma vigil is a disease where the patients are continually inclined to sleep, but cannot.

Co'ma somnole'ntum. Is when the patient continues in a profound sleep; and, when awakened, immediately relapses, without being able to keep open his eyes.

CO'MATA. (*Κωματα:* from *coma.*) A diminution of the powers of voluntary motion, with sleep, or the senses impaired. It is an order of the class *neuroses* of Cullen's Nosology.

COMATOSE. Having a strong propensity to sleep.

COMBU'STIO. (From *comburo,* to burn.) A burn, or scald.

COMBUSTION. (From *comburo,* to burn.) Burning. Among the various operations of chemistry, none acts a more conspicuous part than combustion; and in proportion to its utility in the science, the necessity of thoroughly investigating its nature and mode of action, becomes more obvious to the philosophical chemist.

Lavoisier's Theory of Combustion.

Lavoisier's theory of combustion is founded upon the absorption of oxygen by a combustible body.

Taking this for granted, it follows that combustion is only the play of affinity between oxygen, the matter of heat, and a combustible body.

When an *incombustible* body (a brick for instance) is heated, it undergoes no change, except an augmentation of bulk and temperature; and when left to itself, it soon regains its former state. But when a *combustible* body is heated to a certain degree, in the open air, it becomes on a sudden intensely hot, and at last emits a copious stream of caloric and light to the surrounding bodies. During this emission, the burning body gradually wastes away. It either disappears entirely, or its physical properties become totally altered. The principal change it suffers, is that of being no longer capable of combustion. If either of these phenomena, namely, the emission of heat and light, and the waste of substance, be wanting, we do not say that a body is undergoing combustion, or that it is burning. It follows, therefore, that every theory of combustion ought to explain the following facts:

1. Why a burning body is consumed, and its individuality destroyed.

2. Why, during the progress of this alteration, heat and light are emitted.

For the elucidation of these objects, Lavoisier's theory has laid down the following laws:

1. Combustion cannot take place without the presence of oxygen, and is more rapid in proportion to the quantity of this agent, in contact with the inflamed body.

2. In every act of combustion, the oxygen present is consumed.

3. The weight of the products of every body after combustion, corresponds with the weight of the body before combustion, *plus* that of the oxygen consumed.

4. The oxygen absorbed by the combustible body may be recovered from the compound formed, and the weight regained will be equal to the weight which disappeared during the combustion.

5. In every instance of combustion, light and heat, or fire, are liberated.

6. In a limited quantity of air, only a certain quantity of the combustible body can be burnt.

7. The air, wherein a body has been burnt, is rendered unfit for continuing combustion, or supporting animal life.

Though every case of combustion requires that light and heat should be evolved, yet this process proceeds very differently in different circumstances; hence the terms *ignition,* or glowing heat; *inflammation,* or accension; and *detonation,* or explosion.

Ignition takes place when the combustible body is not in an aëriform state.

Charcoal, pyrophorus, &c. furnish instances of this kind.

It seems as if the phenomenon of glowing was peculiar to those bodies which require a considerable quantity of caloric, to become converted into the gaseous state.

The disengagement of caloric and light is rendered more evident to the senses in the act of

Inflammation, or accension. Here the combustible substances are more easily converted into an elastic or aëriform state.

Flame, therefore, consists of the inflammable matter in the act of combustion in the gaseous state. When all circumstances are favourable to the complete combustion of the products, the flame is perfect; if this is not the case, part of the combustible body, capable of being converted into the gaseous state, passes through the luminous flame unburnt, and exhibits the appearance of smoke. Soot, therefore, always indicates an imperfect combustion. Hence a common lamp smokes, an Argand's lamp yields no smoke.

This degree of combustion is very accurately exemplified in the

Flame of Candles. — When a candle is first lighted, which must be done by the application of actual flame, a degree of heat is given to the wick, sufficient to destroy the affinity of its constituent parts; part of the tallow is instantly melted, volatilized, and burnt. As this is destroyed by combustion, another portion melts, rises, and supplies its place, and undergoes a like change. In this way combustion is maintained. The tallow is liquified as it comes into the vicinity of the flame, and is, by the capillary attraction of the wick, drawn up to supply the place of what is burnt; the unmelted tallow, by this means, forms a kind of cup.

The congeries of capillary tubes which form the wick is black, because the charcoal of the cotton becomes predominant, the circum-ambient air is defended by the flame from oxidizing it; it therefore remains, for a considerable time, in its natural state; but when the wick, by the continual consumption of tallow, becomes too long to support itself in a perpendicular position, its upper extremity projects nearly out of the cone of the flame, and there forms a support for an accumulation of soot, which is produced by the imperfect combustion. A candle, in this situation, affords scarcely one-tenth of the light it can otherwise give, and tallow candles, on this account, require continual snuffing.

But if the candle be made of wax, the wick does not long occupy its place in the middle of the flame; its thinness makes it bend on one side, when its length is too great for its vertical position; its extremity comes then into contact with the air, and is completely burnt, or decomposed, except so much of it as is defended by the continual afflux of the melted wax. This small wick, therefore, performs the office of snuffing itself. The difficult fusibility of wax enables us to use a thinner wick for it than can be used for tallow, which is more fusible. But wax being a substance which contains much more oxygen than tallow, or oil, the light it affords is not so luminous.

Detonation is an instantaneous combustion, accompanied with a loud report; it takes place in general when the compounds resulting from the union of two or more bodies, occupy much more or less space than the substances did before their union; a great impulse is therefore given to the surrounding air, or else a vacuum is formed, and the air rushing in from all sides to fill it up is the cause of the report.

A mixture of oxygen and hydrogen gases detonates very loud. Gunpowder, fulminating gold, silver, and mercury; oxygenated muriate of potash; and various other explosive compounds, are capable of producing very loud detonations.

With respect to the disengagement of light and caloric.

By the older chemists, it was universally supposed that the light and heat emitted during combustion, proceeded from the inflammable body; and this opinion would indeed appear unquestionable, while the composition of the atmosphere was imperfectly known. The burning body appeared luminous and felt hot, and no other agent was supposed to be concerned; the conclusion that the light and heat were evolved from the burning substance, was, therefore, unavoidable. But when the nature of the atmosphere was ascertained, and when it became evident that part of the air was absorbed during combustion, the former conclusion fell to the ground; for when two bodies exert a mutual action on each other, it becomes *à priori* equally probable that the products may be derived from either of them; consequently, the light and heat evolved might proceed either from the one or the other. Whether they proceed from the atmosphere, or from the combustible body, they must be separated at the part where the combination takes place; that is, upon the surface of the burning body itself; and consequently it appeared luminous and heated, while the air being invisible escaped observation.

When the laws of heat became known, at least when it was ascertained that bodies contain at the same temperature, and in equal quantities, either of mass or bulk, unequal quantities of heat, the conclusion became probable, that the caloric evolved in combustion proceeded rather from the oxygen gas of the atmosphere, than from the combustible body; since the former contains a much larger quantity than the latter. The caloric evolved was therefore supposed to be derived from the *condensation* of the oxygen gas in the new combination into which it entered.

Though *approaching* to the truth, this explanation is not strictly true. It is not merely from the oxygen gas being *condensed* that the caloric is evolved, because, in many cases of combustion, the product still exists in the gaseous state, and in others, the quantity of caloric evolved bears no proportion to the degree of condensation. Philosophers ascribed this to a change of capacity; for, in different bodies, the difference in the proportion of the capacities before and after combustion, is by no means uniform; and hence the difference in the quantities of caloric extricated in various cases of combustion.

This being premised, it remains to explain the origin of the light emitted during combustion; for although we take it for granted that the caloric is evolved from the oxygen gas, we cannot infer that the light has the same origin.

It is very probable that light is a constituent part of inflammable bodies; for it is frequently evolved in combinations when the oxygen is merely *transferred* from one inflammable substance to another. In those cases it must proceed from the inflammable body. The accension of oils by the affusion of acids, the combustion of metals in the same way, furnish instances of the kind.

It seems, therefore, probable that the light is derived from the inflammable substance; and that the oxygen, combining with the bases of these substances, disengages the light.

It may be concluded then, that light enters into the composition of all combustible bodies; but as we are unable to separate the light, so as to obtain these bodies pure, we treat of them as simple bodies.

According to this theory, the combustion of phosphorus in oxygen gas, is therefore, the effect of a double affinity. The basis of the oxygen gas unites with the phosphorus, to form phosphoric acid; and the light disengaged from the phosphorus, together with the heat of the oxygen gas, produces the vivid flame.

The quantity of light emitted by different bodies is supposed to depend on the quantity contained in them, and on the proportion in which it is united to caloric.

Such is the theory of combustion of Lavoisier, modified by Gren, Leonardi, and Richter.

Thomson's Theory of Combustion.

Though the preceding theory of combustion is simple and beautiful, it appears, from what we are now going to state, to be by no means completely satisfactory.

It has misled chemists, by confining the term combustion to the act of oxygenation, and considering that all bodies, during their combustion, combine with oxygen, without at the same time recollecting that this latter effect may take place without any of the phenomena usually attendant on combustion; and that, though certainly all combustion pre-supposes the combination of oxygen with a base, yet this combination may be, and repeatedly is, effected where no combustion can possibly take place. Nothing can be more evident than the difference which, in numberless instances, prevails between the act of oxygenation in bodies and that of combustion, inasmuch as neither the phenomena attending on, nor the results arising from them, are the same. That a distinction therefore should be made between these processes is obvious; and it is on this account that Dr. Thomson has offered a theory, which considers this subject in a new point of view, and which bids fair to enable us to estimate the phenomena of combustion much better than has hitherto been done.

According to Dr. Thomson's theory, all the bodies concerned in combustion are either, 1. *Combustibles.*—2. *Supporters of combustion.*—3. *Incombustibles.*

I. Combustible bodies are those substances which are said, in common language, to *burn*. During the combustion, they appear to emit light and heat, and, at the same time, gradually waste away. When this change has reached its *maximum*, the process of combustion is at an end.

The class of combustibles is very numerous; but all the bodies belonging to it may be sub-divided into three sets, namely: 1. Simple combustibles. 2. Compound combustibles. 3. Combustible oxides, &c.

Simple Combustibles.

1. Sulphur.
2. Phosphorus.
3. Diamond, or Carbon.
4. Hydrogen gas.
5. All the metals.
6. Boron.

Compound Combustibles.

The *compound combustibles* consist of compounds, formed by the simple combustibles uniting together, and are of course much more numerous than the simple combustibles. They may be arranged under the five following heads:

1. Sulphurets.
2. Phosphurets.
3. Carburets.
4. Alloys.
5. Sulphuretted, phosphuretted, and carburetted hydrogen.

The *combustible oxides* are either simple, having a single base, or compound, having more than one base. All the simple combustible oxides are by combustion converted into acids.

The compound combustible oxides are by far the most numerous.

II. The supporters of combustion are bodies which are not of themselves, strictly speaking, capable of undergoing combustion, but which are absolutely necessary for the process; for no combustible body can burn unless some one or other of them be present. Whenever they are excluded, combustion ceases. All the supporters of combustion known at present are oxygen, chlorine, iodine, and the compounds which these form with each other, and with azote.

There are indeed certain substances besides these, which possess nearly the same properties; these shall be afterwards enumerated under the title of *partial supporters.*

III. The INCOMBUSTIBLE BODIES are neither capable of undergoing combustion themselves, nor of supporting the combustion of those bodies that are; they are therefore not immediately connected with combustion; though most of them appear to be the results of that process. Azote, the alkalies, earths, &c. come under this division.

Some of the alkalies and earths possess certain properties in common with combustibles, and are capable of exhibiting phenomena somewhat analogous to combustion; which will be described afterwards under the title of *semi-combustion.*

In every case of combustion, there must therefore be present a *combustible* body, and a *supporter* of combustion. During combustion, the combustible always unites with the supporter. *It is this combination which occasions the apparent waste and alteration of the combustible.* The new compound thus formed is a *product of combustion.* Every product of combustion is either, 1. *an acid*, or 2. *an oxide*, &c. It is true, indeed, that other bodies sometimes make their appearance during combustion, but these will be found, upon examination, not to be products, nor to have undergone combustion.

Thus one of the two characteristic marks which distinguish combustion, namely, the apparent *waste and alteration of the combustible body*, has been fully explained. For the explanation of it we are indebted to Lavoisier, as stated before.

But though the combination of the combustible with oxygen, or other supporter, be a constant part of combustion, yet the facility with which combustibles burn is not proportional to their apparent affinity for oxygen.

Phosphorus, for instance, burns more readily than charcoal; yet charcoal is capable of abstracting oxygen from phosphorus, and of course has a greater affinity for it. Some of the combustible oxides take fire more readily than some of the simple combustibles; alkohol, ether, and oils, are exceedingly combustible, whereas all the metals require very high temperatures when the supporter is air.

This greater combustibility of combustible oxides is probably owing to the weaker affinity by which their particles are united. Hence they are more easily separated than homogeneous particles, and of course combine more readily with oxygen; those simple combustibles which melt easily, or which are in the state of elastic fluids, are also very combustible, because the cohesion between their particles is easily overcome.

It is owing to the same inferiority in the cohesion of heterogeneous particles, that some of the compound supporters occasion combustion in circumstances when the combustibles would not be acted on by simple supporters.

Thus phosphorus burns in air at the common temperature; but it does not burn in oxygen gas, unless its temperature be raised. Thus also oils burn rapidly when mixed with nitric acid. Nitrous gas and nitrous oxide constitute exceptions to this rule.

None of the *products* of combustion are combustible, according to the definition of combustion here given. This want of combustibility is not owing to their being saturated with oxygen; for several of them are capable of combining with an *additional dose* of it. But, during this combination, no caloric or light is ever emitted; and the compound formed differs essentially from a *product* of combustion; for by this additional dose of oxygen, the *product* is converted into a *supporter. Hence we see that combustion ought not to be confounded with the combination of a body with oxygen*, as was done formerly.

Combustion, indeed, cannot take place without the combination of oxygen or other supporter; but oxygen may combine with bodies in different proportions without the phenomena of combustion; and the *product obtained* by combustion is capable of becoming converted into a *supporter* of *combustion;* for instance, if lead be melted, and kept so for some time, it becomes covered with a grey pellicle or *oxide of lead*, a product consisting of oxygen and lead; but if this oxide is suffered to be heated longer, it absorbs an additional quantity of oxygen, and becomes converted into a yellow powder, called yellow *oxide of lead.* If this yellow oxide be again exposed to heat, it absorbs still more oxygen, and becomes converted into *red oxide of lead.* When the *supporters* thus formed by the combination of oxygen with *products*, are made to support combustion, they do not lose all their oxygen, but only the additional dose which constituted them supporters. Of course they are again reduced to their original state of products of combustion. Hence it follows, that they owe their properties as supporters, not to the *whole* of the oxygen which they contain, but to the *additional dose* which constituted them supporters. We may therefore call them *partial supporters*, indicating by the term, that part only of their oxygen is capable of supporting combustion, and not the whole.

All the partial supporters with which we are acquainted, contain a metallic basis; for metallic oxides are the only products at present known, capable of combining with an additional dose of oxygen. It is a circumstance highly deserving attention, that when metals are capable of combining with several doses of oxygen, the product, or oxide formed by combustion is seldom or never that which contains a *maximum* of oxygen.

Thus it is evident that several of the products of combustion are capable of combining with oxygen. *The incombustibility of products, therefore, is not owing to their want of affinity for oxygen,* but to some other cause.

No product of combustion is capable of *supporting* combustion. This is not occasioned by any want of affinity to combustible bodies; for several of them are capable of combining with an additional dose of their basis. But by this combination, they *lose* their properties as products, and are converted into *combustibles*. The process, therefore, differs essentially from combustion. Thus phosphoric acid, a product of combustion, is capable of combining with an additional dose of phosphorus, and forming *phosphorous* acid a combustible body. When this last acid is heated in contact with a supporter, it undergoes combustion; but it is only the additional dose of the combustible which burns, and the whole is converted into phosphoric acid. Hence we see that it is not the whole basis of these compounds which is combustible, but merely the additional dose. The compounds, therefore, formed by the union of a product and combustible, may be termed *partial combustibles;* indicating by the name, that a part only of the base is capable of undergoing combustion. Since the products of combustion are capable of combining with oxygen, but never exhibit the phenomena of combustion, except when they are in the state of partial combustibles, combustible bodies must contain a substance which they lose in burning, and to which they owe their combustibility; for, after they have lost it, they unite to oxygen *without* exhibiting the phenomena of combustion.

Though the products of combustion are not capable of supporting combustion, they not unfrequently part with their oxygen just as supporters do, give it out to combustibles, and convert them into products; but during this process, no heat nor light is ever evolved. Water, for instance, gives out its oxygen to iron, and converts it into the *black oxide,* a product. Thus we see that the oxygen of products is capable of converting combustibles into products, just as the oxygen of supporters; but during the combination of the last only, are heat and light emitted. The oxygen of supporters then contains something which the oxygen of products wants.

Whenever the whole of the oxygen is abstracted from products, the combustibility of their base is restored as completely as before combustion; but no substance is capable of abstracting the whole of the oxygen, except a *combustible,* or a *partial combustible.* Water, for instance, is a product of combustion, whose base is hydrogen. To restore the combustibility of the hydrogen, we have only to mix water with iron or zinc filings, and an acid; the metal is oxidized, and the hydrogen gas is evolved as combustible as ever. But no substance, except a combustible, is capable of separating hydrogen gas from water, by combining with its oxygen. Thus we see that combustibles are capable of restoring the combustibility of the bases of products; but they themselves lose their combustibility by the process, and are converted into products. Combustibility, therefore, may be thrown at pleasure from one body to another.

From these facts it is obvious that the products of combustion may be formed without combustion; but in these cases a new combustible is always evolved. The process is merely an interchange of combustibility; for the combustible is converted into a product only by means of a product. Both the oxygen and the base of the product having undergone combustion, have lost something which is essential to combustion. The process is merely a double decomposition. The product yields its oxygen to the combustible, while at the same time the combustible gives out something to the base of the product; the combustibility of that base then is restored by the loss of its oxygen, and by the restoration of something which it receives from the other combustible thus converted into a product.

There is indeed another method of forming the products of combustion without actual combustion in certain cases; but the phenomena are much more complicated. This method is to expose them to the action of some of the supporters dissolved in water; especially nitric acid. Thus most of the metallic oxides may be formed without combustion by the action of that acid on the metals. But, in that case, a new supporter is always evolved, namely, nitrous gas; ammonia, a new combustible, is also usually formed; and, not unfrequently, the *product* is converted into a *partial supporter.*

No *supporter* can be produced by combustion, or by any equivalent process. As several of the supporters consist of oxygen combined with a base, it follows as a consequence, that oxygen may combine with a base without losing that ingredient, which occasions combustion. The act of combination of oxygen with a base, therefore, is by no means the same with combustion. If we take a view of the different supporters, we shall find that all of them which can be obtained artificially, are procured either from other supporters or by the agency of electricity.

I. Oxygen gas may be procured from nitric acid, and from several of the partial supporters, as the black oxide of manganese, the red oxides of lead and of mercury. The action of heat is always necessary; but the process is very different from combustion.

II. Air, as far as is known at present,

cannot be formed artificially. The gas, indeed, which comes over during part of the usual distillation of nitrate of potash and sulphuric acid, to obtain nitric acid, resembles air very closely. But it is obtained from a supporter.

III. Nitrous oxide has hitherto been only procured from nitrous gas and nitric acid (in nitrate of ammonia,) both of which are supporters.

IV. Nitrous gas can only be procured by the decomposition of nitric acid, a supporter.

V. Oxymuriatic acid, or Chlorine, can be formed by the action of muriatic acid on the black oxyde of manganese, the red oxides of lead, iron, or mercury; all of which are partial supporters.

VI. Nitric acid is formed spontaneously upon the surface of the earth, by processes with which we are but imperfectly acquainted; but which certainly have no resemblance to combustion. Its oxygen is probably furnished by the *air*, which is a supporter; at least, it has been observed, that nitrogen and oxygen, at high temperatures, are capable of forming nitric acid.

This formation of nitric acid by means of electricity, has been considered as a combustion, but for what reason it is not easy to say: the substance acted upon is not a combustible with a supporter, but a supporter alone. Electricity is so far from being equivalent to combustion, that it sometimes acts in a manner diametrically opposite; *unburning*, if we may use the expression, a substance which has already undergone combustion, and converting a *product* into a *combustible* and a *supporter*. Thus it decomposes water, and converts it into oxygen and hydrogen gas; therefore it must be capable of supplying the substances which the oxygen and combustible lose when they combine by combustion, and form a product.

Several of the supporters and partial supporters are capable of combining with combustibles, without undergoing decomposition, or exhibiting the phenomena of combustion. In this manner, the yellow oxide of gold combines with ammonia; the red oxide of mercury with oxalic acid; and oxymuriatic acid with ammonia. Thus also nitrate of potash may be combined, or at least intimately mixed with several combustible bodies, as in gun-powder, fulminating powder, &c. In all these compounds, the oxygen of the supporter and the combustible retain the ingredients which render them susceptible of combustion; hence the compound is still combustible. And in consequence of the intimate combination of the component parts, the least alteration is apt to destroy the equilibrium which subsists between them; the consequence is, combustion and the formation of a new compound. Hence these compounds burn with amazing facility, not only when heated, but when triturated, or struck smartly with a hammer. They have therefore received the name of *detonating* or *fulminating* bodies. Thus we have fulminating gold, fulminating mercury, fulminating powder, &c.

Such are the properties of the combustibles, the supporters, and the products; and such the phenomena which they exhibit when made to act upon each other.

If we compare together the *supporters* and the *products*, we shall find that they resemble each other in many respects. Both of them contain oxygen, or other supporter, as an essential constituent part; both are capable of converting combustibles into products; and several of both combine with combustibles and with additional doses of oxygen. But they differ from each other in their effects on combustibles. The former only produce combustion; whereas the products convert combustibles into products without combustion. Now, as the ultimate change produced upon combustibles by both these sets of bodies is the same, and as the substance which combines with the combustibles is in both cases the same, oxygen for instance, we must conclude that this oxygen in the supporters contains something which the oxygen of the products wants, something which separates during the passage of the oxygen from the product to the combustible, and occasions the combustion, or emission of fire, which accompanies this passage. The oxygen of supporters then contains some ingredient which the oxygen of products wants. Many circumstances concur to render it probable that this ingredient is *caloric*.

The *combustibles* and the *products* also resemble each other. Both of them contain the same or a similar base; both frequently combine with combustibles, and likewise with oxygen; but they differ essentially in the phenomena which accompany their combination with oxygen. In the one case, *fire is emitted*; in the other, not. If we recollect that no substance but a combustible is capable of restoring combustibility to the base of a product, and that at its doing so it always loses its own combustibility; and if we recollect farther, that the base of a product does not exhibit the phenomena of combustion even when it combines with oxygen, we cannot avoid concluding, that all combustibles contain an ingredient which they lose when converted into products, and that this loss contributes to the fire which makes its appearance during the conversion. Many circumstances contribute to render it probable that this ingredient is *light*.

If we suppose that the oxygen of supporters contains caloric as an essential ingredient, and that light is a component part of all combustibles, the phenomena of combustion above enumerated, numerous and intricate as they are, admit of an easy and obvious explanation. The component parts of the oxygen of supporters are two; namely, 1. a base, 2. caloric. The component parts of combustibles are likewise two; namely, 1. a base, 2. light. During combustion, the base of the oxygen combines with the base of the combustible, and forms the product; while, at the same time, the caloric of the oxygen combines with the light of the combustible, and the compound flies off in the form of fire. Thus combustion is a double decomposition; the oxygen and combustible divide themselves each into two portions, which combine in pairs; the one compound is the *product*, and the other the *fire*, which escapes.

Hence the reason that the oxygen of products is unfit for combustion. It wants its caloric. Hence the reason that combustion does not take place when oxygen combines with products, or with the base of supporters. These bodies contain no light. The caloric of the oxygen of course is not separated, and no fire appears. And this oxygen still retaining its caloric, is capable of producing combustion whenever a body is presented which contains light, and whose base has an affinity for oxygen. Hence also the reason why a combustible alone can restore combustibility to the base of a product. In all such cases, a double decomposition takes place. The oxygen of the product combines with the base of the combustible, while the light of the combustible combines with the base of the product.

But the application of this theory to all the different phenomena described above, is so obvious, that it is needless to give any more examples. Let us rather inquire, with the author, into the evidences which can be brought forward in its support.

As caloric and light are always emitted during combustion, it follows that they must have previously existed in the combustible, the supporter, or in both.

That the oxygen of the supporters contains either one or both of these substances, follows incontrovertibly from a fact already mentioned, namely, that the oxygen of products will not support combustion, while that of supporters will. Hence the oxygen of supporters must contain something which the oxygen of the products wants, and this something must be caloric, or light, or both.

That the oxygen of some of the supporters at least contains caloric, as an ingredient, has been proved, in a satisfactory manner, by the experiments of Crawford, Lavoisier, and La Place. Thus the temperature of hot-blooded animals is maintained by the decomposition of *air*. Now if the oxygen of one supporter contains caloric, the same ingredient must exist in the oxygen of every supporter, because all of them are obviously in the same state. Hence we conclude that the oxygen of every supporter contains caloric as an essential ingredient.

The light emitted during combustion must either proceed from the combustible or the supporter. That it proceeds from the combustible, must appear pretty obvious, if we recollect that the colour of the light emitted during combustion varies, and that this variation usually depends, not upon the supporter, but upon the combustible. Thus charcoal burns with a red flame, sulphur with a blue or violet, zinc with a greenish-white, &c.

The formation of combustibles in plants, obviously requires the presence and agency of light. The leaves of plants emit oxygen gas, when exposed to the sun's rays, but never in the shade, or in the dark.

Besides vegetation, we are acquainted with two other methods of *unburning* products, or of converting them into products and combustibles, by exposing them, in certain circumstances, to the agency of *fire*, or of *electricity*. The oxides of gold, mercury, &c. when heated to redness, are decomposed, oxygen gas is emitted, and the pure metal remains behind. In this case, the necessary caloric and light must be furnished by the fire; a circumstance which explains why such reductions always require a red heat. When carbonic acid is made to pass repeatedly over red-hot charcoal, it combines with a portion of charcoal, and is converted into gaseous oxide of carbon. If this gas be a combustible oxide, the base of the carbonic acid and its oxygen must have been supplied with light and caloric from the fire; but if it be a *partial combustible*, it is merely a compound of carbonic acid and charcoal: which of the two it is, remains still to be ascertained.

Electricity decomposes water, and converts it into oxygen gas and hydrogen gas; it must, therefore, supply the heat and the light which these bodies lost when converted into a product.

These facts, together with the exact correspondence of the theory given above with the phenomena of combustion, render it so probable, that Dr. Thomson has ventured to propose it as an additional step towards a full explanation of the theory of combustion. Every additional experiment has served to confirm it more and more. It even throws light upon the curious experiments of the accension of metals with sulphur, which succeed *in vacuo*, under mercury, in nitrogen gas, &c.

Dr. Thomson has noticed, that the same emission of caloric and light, or of *fire*, takes place when melted sulphur is made to combine with potash, or with lime, in a crucible or glass tube, and likewise when melted phosphorus is made to combine with lime heated to redness. He supposes that, in all probability, barytes and strontia exhibit the same phenomenon when combined with melted sulphur or phosphorus; and perhaps some of the metals when combined with phosphorus.

The phenomena Dr. Thompson explains thus: — The sulphur and phosphorus are in the melted state, and therefore contain caloric as an ingredient; the alkalies, earths, and metals which produce the phenomenon in question, contain light as an essential ingredient. The sulphur, or phosphorus combines with the base of the metal, earth, or alkali; while, at the same time, the *caloric,* to which the sulphur or phosphorus owed its fluidity, combines with the *light* of the metal, earth, or alkali; and the compound flies off under the form of *fire.*

Thus the process is exactly the same with combustion, excepting as far as regards the product. The melted sulphur, or phosphorus, acts the part of the *supporter,* while the metal, earth, or alkali, occupies the place of the *combustible.* The first furnishes caloric, the second light, while the base of each combines together. Hence we see that the base of sulphurets and phosphurets resembles the base of products in being destitute of light; the formation of these bodies exhibiting the separation of fire like *combustion,* but the product differing from a product of combustion in being destitute of oxygen, Dr. Thomson distinguishes the process by the title of *semi-combustion;* indicating by the term, that it possesses one half of the characteristic marks of combustion, but is destitute of the other half.

The only part of this theory which requires proof is, that light is a component part of the earths and alkalies. But as potash and lime are the only bodies of that nature, which we are certain to be capable of exhibiting the phenomena of semi-combustion, the proofs must of necessity be confined to them. That *lime* contains light as a component part, has been long known. Meyer and Pelletier observed long ago, that when water is poured upon lime, not only heat but light is emitted. Light is emitted also abundantly, when sulphuric acid is poured upon magnesia, or upon lime, potash, or soda, freed from the water of crystallization. In all these cases, a *semi-combustion* takes place. The water and the acid being solidified, give out *caloric,* while the lime or potash gives out *light.*

That lime, during its burning, combines with light, and that light is a component part of lime, is demonstrated by the following experiment, for which we are indebted to Scheele.

Fluor spar (fluate of lime) has the property of phosphorescing strongly when heated, but the experiment does not succeed twice with the same specimen. After it has been once heated sufficiently, no subsequent heat will cause it to phosphoresce. Now phosphorescence is merely the emission of light; light of course is a component part of fluor spar, and heat has the property of separating it. But the phosphorescing quality of the spar may be again recovered to it, or, which is the same thing, the light which the spar had lost may be restored by the following process: —

Decompose the fluate of lime by sulphuric acid, and preserve the fluoric acid separate. Boil the sulphate of lime thus formed, with a sufficient quantity of carbonate of soda; a double decomposition takes place; sulphate of soda remains in solution, and carbonate of lime precipitates. Ignite this precipitate in a crucible, till it is reduced to lime, and combine it with the fluoric acid to which it was formerly united. The fluor spar thus regenerated, phosphoresces as at first. Hence the lime, during its ignition, must have combined with light.

That potash contains light, may be proved in the same manner as the existence of that body in lime. Now as potash is deprived of its carbonic acid by lime, the Doctor supposes that the process must be a double decomposition; namely, that the base of the lime combines with carbonic acid, while its light combines with the potash.

These remarks on semi-combustion might easily be much enlarged upon: for it is obvious, that whenever a liquid combines with a solid containing light, and the product is a solid body, something analogous to semi-combustion must take place.

Comedo'nes. (From *comedo,* a glutton.) A sort of worms which eat into the skin and devour the flesh.

Co'mfrey. See *Symphytum.*

Comi'sdi. The gum-arabic.

Comi'ste. The epilepsy. This name arose from the frequency of persons being seized with this disorder, while in the assemblies called Comitia.

Comiti'ssa. (A countess.) Some preparations are distinguished by this name, as pulvis Comitissæ de Cantia, the Countess of Kent's powder. Also the Cinchona was called *Pulvis Comitissæ.*

Commage'num. (From *Commagene,* a place in Syria, whence it was brought.) Syrian ointment, mentioned by Galen.

Commanduca'tio. (From *commanduco,* to eat.) The act of mastication, or chewing.

Comma'nsum. (From *commando,* to eat.) A masticatory. A medicine put into the mouth and chewed, to promote a discharge of phlegm, or saliva.

Commendato'rius. (From *commendo,* to recommend.) An epithet of the traumatic balsam, Tinctura Benzoes composita, from its singular virtues and usefulness.

Co'mmi. Gum. When alone it signifies gum arabic. The κομμι λευκον mentioned by Hippocrates in his De Morb. Mulieb. is gum arabic.

COMMISSU'RA. (From *committo,* to join together.) A suture, juncture, or joint. A term applied in anatomy to the corners of the lips, where they meet together; and also to certain parts of the brain which go across and join one hemisphere to the other.

COMMISSU'RA ANTE'RIOR CE'REBRI. The white nerve-like substance which crosses the anterior part of the third ventricle of the brain, immediately above the infundibulum, and between the anterior crura of the fornix; uniting one hemisphere of the brain with the other.

COMMISSU'RA MA'GNA CE'REBRI. The *corpus callosum* of the brain is so termed by some writers.

COMMISSU'RA POSTE'RIOR CE'REBRI. A white nerve-like substance, which passes from one hemisphere of the brain across to the other, immediately over the opening of the aquæduct of Sylvius, in the posterior part of the third ventricle of the brain, and above the *corpora quadrigemina*.

Commu'nicant. (From *communico*, to make partake.) A term applied, by Bellini, to fevers of two kinds afflicting the same person, wherein as one goes off the other immediately succeeds

Compa'ges. (From *compingo*, to put together.) A suture, or joint. A commissure.

COMPA'RATIVE ANA'TOMY. *Anatomia comparativa.* Zootomy. The dissection of brute animals and fishes, to compare them with the human body.

Compe'ba. See *Piper Cubeba.*

Comple'tion. A term used by the antient writers in various acceptations; but latterly it signifies only the same as *Plethora.*

COMPLE'XUS. (*Complexus*, sc. *musc.* from *complector*, to comprise.) *Complexus seu biventer cervicis* of Albinus. *Dorso trachelon occipital* of Dumas. A muscle situated on the back part of the neck, that draws the head backwards, and to one side; and when both act, they draw the head directly backward. It arises from the transverse processes of the seven superior vertebræ of the back, and four inferior of the neck, by as many distinct tendinous origins; in its ascent, it receives a fleshy slip from the spinous process of the first vertebra of the back: from these different origins it runs upwards, and is every where intermixed with tendinous fibres. It is inserted, tendinous and fleshy, into the inferior edge of the protuberance in the middle of the os occipitis, and into a part of the curved line that runs forwards from that protuberance. It draws the head backwards.

Comple'xus mi'nor. See *Trachelo-mastoideus.*

COMPRE'SSION. (From *comprimo*, to press together.) By this term, surgeons express a diseased state of the body, which is the effect of something pressing upon the brain. It should be distinguished from concussion and inflammation. When the brain is compressed either by bone, extravasated blood, or any other fluid, there is a general insensibility, the eyes are half open, the pupils dilated and motionless, even when a candle is brought near the eye; the retina is insensible; the limbs relaxed; the breathing stertorous; the pulse slow, and, according to Mr. Abernethy, less subject to intermission than in cases of concussion. Nor is the patient ever sick, when the pressure on the brain, and the general insensibility, are considerable; for the very action of vomiting betrays an irritability in the stomach and œsophagus.

COMPRE'SSOR NA'RIS. (*Compressor;* from *comprimo*, to press together.) *Rinæus vel nasalis* of Douglas. *Transversalis vel myrtiformis* of Winslow. *Dilatores alarum nasi* of Cowper; and *Maxillo narinal* of Dumas. A muscle of the nose, that compresses the alæ towards the septum nasi particularly when we want to smell acutely, It also corrugates the nose, and assists in expressing certain passions. It arises, by a narrow beginning, from the root of the ala nasi externally, and spreads into a number of thin, separate fibres, which run up along the cartilage in an oblique manner towards the back of the nose, where it joins with its fellow, and is inserted into the narrow extremity of the os nasi, and nasal process of the superior maxillary bone.

Compu'nctio. (From *compungo*, to prick.) A puncture.

CONA'RIUM. (From *κωνος*, a cone.) The pineal gland is so named, from its conical shape. See *Pineal gland.*

Concau'sa. (From *con*, with, and *causa*, a cause.) A cause which co-operates with another in the production of a disease.

Concentra'ntia. (From *concentro*, to concentrate.) Absorbents of acids are so called, because they remove the obstructions which keep asunder the affinities between the two powers.

CONCENTRA'TION. (From *con*, and *centrum*, a centre.) The volatilizing of part of the water of fluids, in order to improve their strength. The matter to be concentrated, therefore, must be of superior fixity to water. This operation is performed on some acids, particularly the sulphuric and phosphoric. It is also employed in solutions of alkalies and neutral salts.

CONCE'PTION. (*Conceptio;* from *concipio*, to conceive.) The impregnation of the ovulum in the female ovarium, by the subtile prolific aura of the semen virile. In order to have a fruitful coition, it is necessary that the semen be propelled into the uterus, or vagina, so that its fecundating vapour shall be conveyed through the Fallopian tube to the ovarium: it is also necessary that there be a certain state of the ovarium of the female in order to impregnate it; which is, that the ovum shall be mature, and embraced by the fimbriæ of the Fallopian tube, to convey that vivifying principle to the ovum. See *Generation.*

CO'NCHA. (*Concha*, *κογχη*, a liquid measure amongst the Athenians.) A term applied by anatomists to several parts of the body, as the hollow of the ear, the spongy bones of the nose, &c.

Co′ncha auri′culæ. See *Auricula.*

Co′ncha au′ris. The hollow part of the cartilage of the outer ear.

Co′nchæ na′rium. (*Concha*, a shell.) The turbinated portion of the ethmoid bone, and the inferior spongy bones of the nose, which are covered by the Schneiderian membrane, are so termed.

Co′nchus. (From κογχη, a shell; so named from their likeness to a shell.) The cranium, and the cavity of the eye.

Concide′ntia. (From *concido*, to decay.) A decrease of bulk in the whole or any part of the body. A diminution of a tumour.

Concoagula′tio. (From *con*, and *coagulo*, to coagulate together.) The coagulation or crystallization of different salts, first dissolved together in the same fluid.

Conco′ctio. (From *concoquo*, to digest.) Digestion. That operation of nature upon morbid matter which renders it fit to be separated from the healthy fluids.

Concrema′tio. (From *con*, and *cremo*, to burn together.) The same as calcination.

CONCRE′TION. (From *concresco*, to grow together.)

1. The condensation of any fluid substance into a more solid consistence.

2. The growing together of parts which, in a natural state, are separate.

Concu′rsus. (From *concurro*, to meet together.) The congeries or collection of symptoms which constitute and distinguish the particular disease.

CONCU′SSION. (From *concutio*, to shake together.) Concussion of the brain. Various alarming symptoms, followed sometimes by the most fatal consequences, are found to attend great violence offered to the head; and upon the strictest examination, both of the living and the dead, neither fissure, fracture, nor extravasation of any kind can be discovered. The same symptoms and the same events are met with, when the head has received no injury at all *ab externo*, but has only been violently shaken; nay, when only the body, or general frame, has seemed to have sustained the violence. The symptoms attending a concussion, are generally in proportion to the degree of violence which the brain itself has sustained, and which, indeed, is cognizable only by the symptoms. If the concussion be very great, all sense and power of motion are immediately abolished, and death follows soon; but between this degree and that slight confusion (or stunning, as it is called,) which attends most violences done to the head, there are many shades. The following is Mr. Abernethy's description of the symptoms of concussion, and which, he is of opinion, may be properly divided into three stages.

The first is, that state of insensibility and derangement of the bodily powers which immediately succeeds the accident. While it lasts, the patient scarcely feels any injury that may be inflicted on him. His breathing is difficult, but in general without stertor; his pulse intermitting, and his extremities cold. But such a state cannot last long; it goes off gradually, and is succeeded by another, which is considered as the *second* stage of concussion. In this, the pulse and respiration become better, and, though not regularly performed, are sufficient to maintain life, and to diffuse warmth over the extreme parts of the body. The feeling of the patient is now so far restored, that he is sensible of his skin being pinched; but he lies stupid and inattentive to slight external impressions. As the effects of concussion diminish, he becomes capable of replying to questions put to him in a loud tone of voice, especially when they refer to his chief suffering at the time, as pain in the head, &c.; otherwise he answers incoherently, and as if his attention was occupied by something else. As long as the stupor remains, the inflammation of the brain seems to be moderate; but as the former abates, the latter seldom fails to increase; and this constitutes the *third* stage, which is the most important of the series of effects proceeding from a concussion.

These several stages vary considerably in their degree and duration; but more or less of each will be found to take place in every instance where the brain has been violently shaken. Whether they bear any certain proportion to each other or not, is not known; indeed this will depend upon such a variety of circumstances in the constitution, the injury, and the after-treatment, that it must be difficult to determine.

To distinguish between an extravasation and a concussion by the symptoms only, Mr. Pott says, is frequently a very difficult matter; sometimes an impossible one. The similarity of the effects in some cases, and the very small space of time which may intervene between the going off of the one and accession of the other, render this a very nice exercise of the judgment. The first stunning or deprivation of sense, whether total or partial, may be from either, and no man can tell from which; but when these first symptoms have been removed, or have spontaneously disappeared, if such patient is again oppressed with drowsiness, or stupidity, or total or partial loss of sense, it then becomes probable that the first complaints were from concussion, and that the latter are from extravasation; and the greater the distance of time between the two, the greater is the probability not only that an extravasation is the cause, but that the extravasation is of the limpid kind, made gradatim, and within the brain.

Whoever seriously reflects on the nature of these two causes of evil within the cranium, and considers them as liable to frequent combination in the same subject, and at the same time considers that, in many instances, no degree of information can be obtained from the only person capable of giving it (the patient), will immediately be sensible how very difficult a part a practitioner has to act in many of these cases, and how very unjust it must be to call that ignorance which is only a just diffidence arising from the obscurity of the subject, and the impossibility of attaining materials to form a clear judgment.

Mr. Abernethy observes, that in cases of simple concussion, the insensibility is not so great, as where compression exists, the pupils are more contracted, the muscles less relaxed, little or no stertor attends, but the pulse is generally very intermitting, and in slight cases there is often considerable sickness.

Very different modes of treating these accidents have been practised, and no doubt the same means should not be pursued indiscriminately. Much must depend on the state of the patient, when he received the injury, the degree of this, the time which has elapsed since, and other circumstances. Mr. Abernethy considers, that in the first stage little should be done; that the stimulants often employed may be even injurious; but more especially so in the second stage, increasing the tendency to inflammation; and where this has come on, that the antiphlogistic plan must be actively pursued. However, a moderate abstraction of blood, general or topical, will be commonly proper at first, where the habit will allow it, as congestion may be suspected, and to obviate inflammation, especially where the person was intoxicated at the time of the accident; and the effect of this measure may influence the subsequent treatment. If the pulse rose after it, and the patient became more sensible, we should be led to pursue the evacuating plan, taking perhaps more blood, exhibiting active cathartics, as the bowels will be found very torpid, applying cold lotions to the head, &c. These means, however, will be especially called for, when marks of inflammation appear. Sometimes brisk emetics have been very beneficial, as sulphate of zinc, &c.: they are particularly recommended, where the person was under the influence of anger; or the stomach full, when the accident happened; but they are liable to objection, where there are marks of congestion, or increased action in the vessels of the head. If bleeding should lower the pulse, and render the patient worse, evacuations must not be pursued; it may be better generally to wait the gradual return of sensibility, unless the torpor be alarming, like a state of syncope: in which case, or if it continue very long, stimulants appear justified, as ammonia, or others of transient operation, with a blister to the head, to restore some degree of sensibility. If in the sequel marks of irritation appear, as spasms or convulsions, opium joined with antimony, or in the form of Dover's powder, will probably be useful, the necessary evacuations being premised, and the warm bath. In all cases the head should be kept quiet; as the patient is convalescent, tonics and the shower-bath may be employed with advantage; and it will be particularly necessary to avoid great bodily exertion, stimulating liquors, &c. Should paralytic symptoms remain, stimulants general or local may be required. Where alarming symptoms follow an injury to the head, extravasation may be suspected: and the operation of trepanning, skilfully performed, will do no harm to the patient, but may materially relieve, even by the loss of blood attending.

CONDENSA'TION. (From *condenso*, to make thick.) A contraction of the pores of the skin, by means of astringent or cooling medicines. A thickening of any fluid.

CONDIME'NTUM. (From *condio*, to preserve, or season.) A preserve, or sweetmeat.

Condu'ctio. (From *conduco*, to draw along.) In Cœlius Aurelianus, it is a spasm, or convulsion, drawing the muscles out of their proper positions.

CONDU'CTOR. (From *conduco*, to lead, or guide.) A surgical instrument, whose use is to direct the knife in certain operations. It is more commonly called a director.

CO'NDYLE. (From *κονδυ*, an antient cup, shaped like a joint.) A rounded eminence of a bone in any of the joints.

CONDYLO'MA. (From *κονδυλος*, a tubercle, or knot.) *Sarcoma.* A soft, wart-like excrescence, that appears about the anus and pudendum of both sexes. There are several species of condylomata, which have received names from their appearances, as *ficus*, *crystæ*, *thymus*, from their resemblance to a fig, &c.

Conei'on. In Hippocrates it imports hemlock. It is said to be thus named (from *κωναν*, to turn round,) because it produces a vertigo in those who take it inwardly. See *Conium*.

Conessi bark. See *Conessi cortex.*

Cone'ssi co'rtex. See *Nerium antidysentericum.*

CONFE'CTIO. (From *conficio*, to make up.) A confection. In general it means any thing made up with sugar. This term, in the new London Pharmacopœia, includes those articles which were formerly called electuaries and conserves, between which there do not appear to be sufficient grounds to make a distinction.

Confe'ctio amygdala'rum. Confection of almonds. Take of sweet almonds, an ounce; Acacia gum powdered, a drachm; refined sugar, half an ounce. The almonds having been previously macerated in water, and their external coat removed, beat the whole together, until they are thoroughly incorporated. It has been objected to the almond mixture, which is an article of very general use, that it requires considerable time for its extemporaneous preparation, and that it spoils and cannot be kept when it is made. This will be obviated by the present form, which does keep for a sufficient length of time, and rubs down into the mixture immediately.

Confe′ctio aroma′tica. This preparation was formerly called *Confectio cardiaca. Confectio Raleighana.* Take of cinnamon bark, nutmegs, of each two ounces; cloves, an ounce; cardamom seeds, half an ounce; saffron dried, two ounces; prepared shells, 16 ounces; refined sugar powdered, two pounds; water, a pint. Reduce the dry substances, mixed together, to very fine powder; then add the water gradually, and mix the whole, until it is incorporated. This preparation is now much simplified by the London college. It is an excellent medicine, possessing stimulant, antispasmodic, and adstringent virtues; and is exhibited with these views to children and adults, in a vast variety of diseases, mixed with other medicines. It may be given in doses of 10 gr. to a drachm.

Confe′ctio aurantio′rum. *Conserva corticis exterioris aurantii hispalensis. Conserva flavedinis corticum aurantiorum.* Take of fresh external rind of oranges, separated by rasping, a pound; refined sugar, three pounds. Bruise the rind with a wooden pestle, in a stone mortar; then, after adding the sugar, bruise it again, until the whole is thoroughly incorporated. This is well calculated to form the basis of a tonic and stomachic confection, and may be given alone in doses of from two to five drachms, twice or three times a-day.

Confe′ctio cardi′aca. See *Confectio aromatica.*

Confe′ctio ca′ssiæ. *Electuarium cassiæ. Electuarium e cassia.* Confection of cassia. Take of fresh cassia pulp, half a pound; manna, two ounces; tamarind pulp, an ounce; syrup of roses, half a pint. Bruise the manna; melt it in the syrup by a water-bath; then mix in the pulps, and evaporate down to a proper consistence. This is a very elegant, pleasant, and mild aperient for the feeble, and for children. Dose from two drachms to an ounce.

Confe′ctio o′pii. *Confectio opiata. Philonium Londinense. Philonium Romanum.* Confection of opium. Take of hard opium powdered, six drachms; long pepper, an ounce; ginger root, two ounces; caraway-seeds, three ounces; syrup, a pint. Rub together the opium and the syrup previously heated; then add the remaining articles reduced to powder, and mix. To the credit of modern pharmacy, this is the only one that remains of all those complicated and confused preparations called mithridate, theriaca, &c.; it more nearly approximates, in its composition, the philonium than any other, and may be considered as an effectual substitute for them in practice. This very warm and stimulating confection is admirably calculated to relieve diarrhœa, or spasms of the stomach and bowels, and is frequently ordered in doses of from 10 grs. to half a drachm. About 36 grains contain one of opium.

Confe′ctio ro′sæ cani′næ. *Conserva cynosbati. Conserva fructus cynosbati.* Conserve of hips. Confection of dog-rose. Take of dog-rose pulp, a pound; refined sugar powdered, twenty ounces. Expose the pulp in a water-bath to a gentle heat; then add the sugar gradually, and rub them together until they are thoroughly incorporated. This preparation is cooling and adstringent; it is seldom given alone, but mostly joined to some other medicine, in the form of linctus, or electuary.

Confe′ctio ro′sæ ga′llicæ. *Conserva rosæ. Conserva rosarum rubrarum.* Conserve of red rose. Take of the petals of the red rose, before it is expanded, and without the claws, a pound; refined sugar, three pounds. Bruise the petals in a stone mortar; then, having added the sugar, beat them again together, until they are thoroughly incorporated. This is an excellent subastringent composition. Rubbed down with water, it forms an excellent drink, with some lemon-juice, in hæmorrhagic complaints; it may also be given with vitriolated zinc, in the form of an electuary.

Confe′ctio ru′tæ. *Electuarium e baccis lauri.* Confection of rue. Take of rue leaves dried, caraway seeds, bay-berries, of each an ounce and a half; sagapenum, half an ounce; black pepper, two drachms; clarified honey, sixteen ounces. Rub the dry articles together, into a very fine powder; then add the honey, and mix the whole. Its use is confined to clysters.

Confe′ctio scammo′neæ. *Electuarium scammonii. Electuarium e scammonio. Electuarium caryocostinum.* Confection of scammony. Take of scammony gum resin powdered, an ounce and a half; cloves bruised, ginger root powdered, of each, six drachms; oil of caraway, half a drachm; syrup of roses, as much as is sufficient. Rub the dry articles together, into very fine powder; next rub them again whilst the syrup is gradually added; then add the oil of caraway, and mix the whole well together. This is a strong stimulating cathartic, and calculated to remove worms from the primæ viæ, with which view it is mostly exhibited. Dose from ʒss to ʒj.

Confe′ctio se′nnæ. *Electuarium sennæ. Electuarium lenitivum.* Confection of senna. Take of senna leaves, eight ounces; figs, a pound; tamarind pulp, pulp of prunes, cassia pulp, of each half a pound; coriander seeds, four ounces; liquorice root, three ounces; refined sugar, two pounds and a half. Powder the senna leaves with the coriander seeds, and separate, by sifting ten ounces of the mixed powder. Boil the remainder with the figs and the liquorice-root, in four pints of water, until it be reduced to half; then press out and strain the liquor. Evaporate the liquor, until a pint and a half only remains of the whole; then add the sugar, to make syrup. Lastly, mix the pulps gradually with the syrup, and, having added the sifted powder, mix the whole together. This is a mild and elegant aperient, well adapted for pregnant women, and those whose bowels are easily moved. Dose, ʒss to ℥ss.

CONFE′RVA. (From *conferveo,* to knit together.) 1. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Algæ.*

2. A kind of moss: named from its use formerly in healing broken bones.

Confe′rva helminthoco′rtos. See *Corallina corsicana.*

Confe′rva riva′lis. This plant, *Conferva; filamentis simplicissimus æqualibus longissimus,* of Linnæus, has been recommended in cases of spasmodic asthma, phthisis, &c. on account of the great quantity of vital air it contains.

Confirma′ntia. (From *con,* and *firmo,* to strengthen.) Restoratives; also medicines which fasten the teeth in their sockets.

Confluent small-pox. See *Variola.*

Conflu′xion. It is much used by Hippocrates, and his interpreter Galen, from a notion that parts at a distance have mutual consent with one another, and that they are all perspirable by many subtle streams. Paracelsus, according to his way, expressed the former by confederation.

CONFORMA′TIO. (From *conformo,* to shape or fashion.) The natural shape and form of any thing, also a description of some diseases which arise from a bad formation of parts.

Conforta′ntia. (From *conforto,* to strengthen.) Cordial medicines. Strengtheners.

Confortati′va. The same.

Confu′sio. (From *confundo,* to mix together.) A confusion, or disorder in the eyes, proceeding from a rupture of the membranes, which include the humours, by which means they are all confounded together.

Congela′ti. (From *congelo,* to freeze.) *Congelatici.* Persons afflicted with a catalepsy are so called, by which all sensation seems to be taken away.

Congela′tion. (From *congelo,* to freeze.) That change of liquid bodies which takes place when they pass to a solid state, by losing the caloric which kept them in a state of fluidity.

Congelati′va. (From *congelo,* to congeal.) Medicines that inspissate humours, and stop fluxions and rheums.

Co′ngener. (From *con,* and *genus,* kind.) Of the same kind; concurring in the same action. It is usually said of the muscles.

CONGE′STION. (From *congero,* to amass.) A collection of blood or other fluid; a swelling which rises gradually, and ripens slowly, in opposition to that which is soon formed, and soon terminated.

CONGLOBA′TE GLA′ND. (From *conglobo,* to gather into a ball.) *Glandula conglobata.* Lymphatic gland. Globate gland. A round gland formed of a contortion of lymphatic vessels, connected together by cellular structure, having neither a cavity nor any excretory duct: such are the mesenteric, inguinal, axillary glands, &c. See *Gland.*

CONGLOMERATE GLAND. (From *conglomero,* to heap upon one.) *Glandula conglomerata.* A gland composed of a number of glomerate glands, whose excretory ducts all unite into one common duct: such are the salival, parotid glands, &c.

CONGLUTINA′NTIA. (From *conglutino,* to glue together.) Healing medicines; and such as unite parts disjoined by accident.

Co′nis. (Κονις.) Dust, fine powder, ashes, a nit in the hair, scurf from the head; and sometimes it signifies lime.

CONI′UM. (From *κονια,* dust, according to Linnæus, or from *κωναω, circumago;* on account of its inebriating and poisonous quality.) Hemlock.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the officinal hemlock. See *Conium maculatum.*

Coni′um macula′tum. The systematic name for the *cicuta* of the pharmacopœias. *Conium; seminibus striatis,* of Linnæus. It is called by some *camaran;* by others *abiotos;* and, according to Erotian, *cambeion* is an old Sicilian word for cicuta. *Cicuta major fœtida. Conium* of the last London pharmacopœia.

Hemlock is found in every part of England, and is distinguished from those plants which bear some resemblance to it, by the spotted stem. It is generally believed to be a very active poison. In a very moderate dose it is apt to occasion sickness and vertigo; in a larger quantity it produses anxiety, cardialgia, vomiting, convulsions, coma, and death. Baron Stoerk was the first who rought hemlock into repute as a medicine of extraordinary efficacy: and although we have not in this country any direct facts, like those mentioned by Stoerk, proving that inveterate scirrhuses, cancers, ulcers, and many other diseases hitherto deemed irremediable, are to be completely cured by the cicuta; we have however the testimonies of several eminent physicians, shewing that some complaints which had resisted other powerful remedies, yielded to hemlock; and that even some disorders, which if not really cancerous, were at least suspected to be of that tendency, were greatly benefited by this remedy. In chronic rheumatisms, some glandular swellings, and in various fixed and periodical pains, the cicuta is now very generally employed; and from daily experience, it appears in such cases to be a very efficacious remedy. It has also been of singular use in the hooping-cough. Nor is it less efficacious when applied externally; a poultice made of oatmeal and the expressed juice, (or a decoction of the extract, when the other cannot be obtained,) allays the most excruciating torturing pains of a cancer, and thus gives rest to the distracted patient.

The proper method of administering conium internally, is to begin with a few grains of the powder or inspissated juice, and gradually to increase the dose until a giddiness affects the head, a motion is felt in the eyes as if pressed outwards, with a slight sickness and trembling agitation of the body. One or more of these symptoms are the evidence of a full dose, which should be continued until they have ceased, and then after a few days the dose may be increased; for little advantage can be expected but by a continuance of the greatest quantity the patient can bear. In some constitutions even small doses greatly offend, occasioning spasms, heat and thirst; in such instances it will be of no service. As the powder of the dried leaves has been thought to act, and may be depended upon with more certainty than the extract, the following direction should be observed in the preparation: — Gather the plant about the end of June, when it is in flower; pick off the little leaves, and throw away the leaf-stalks: dry the small selected leaves in a hot sun, or in a tin or pewter dish before the fire. Preserve them in bags made of strong brown paper, or powder them and keep the powder in glass phials where the light is excluded; for light dissipates the beautiful green colour very soon, and thus the medicine loses its appearance, if not its efficacy: this mode is recommended by Dr. Withering. The extract should also be made of the plant gathered at this period. From 2 to 20 grains of the powder may be taken twice or thrice a day.

CONJUNCTIVE MEMBRANE. *Membrana conjunctiva.* The thin, transparent, delicate membrane, that lines the internal superficies of one eyelid, and is reflected from thence, over the anterior part of the bulb, then reflected again to the edge of the other eyelid. That portion which covers the transparent cornea cannot, without much difficulty, be separated from it. Inflammation of this membrane is called *ophthalmia.*

CONNA'TUS. (From *con*, and *nascor*, to grow together.) Used much by Hippocrates for what is born with a person; the same with *congenitus.*

CONNEXION. See *Articulation.*

CONNUTRI'TUS. (From *con*, and *nutrior*, to be nourished with.) It is what becomes habitual to a person from his particular nourishment, or what breaks out into a disease in process of time, which gradually had its foundation in the first aliments, as from sucking a distempered nurse, or the like.

CONQUASSA'TIO. Conquassation. In pharmacy it is a species of comminution, or an operation by which moist concrete substances, as recent vegetables, fruits, the softer parts of animals, &c. are agitated and bruised, till, partly by their proper succulence, or by the affusion of some liquor, they are reduced to a soft pulp.

CONRI'NGIUS, HERMAN, was born at Norden, in East Friesland, 1606, and graduated in medicine at Helmstat, where he soon after became professor in that science, and subsequently in physics, law, and politics. He was also made physician and aulic counsellor to the Queen of Sweden, the King of Denmark, and several of the German princes. He wrote numerous works in philosophy, medicine, and history, displaying great learning, and long highly esteemed. In one treatise he refers the degeneracy of the modern Germans to their altered mode of living, the use of stoves, tobacco, &c. He published also an "Introduction to the whole Art of Medicine, and its several Parts," containing a History and Bibliotheca Medica, with numerous Dissertations on particular Diseases. He died in 1681.

Consent of parts. See *Sympathy.*

CONSE'RVA. (From *conservo*, to keep.) A conserve. A composition of some recent vegetable and sugar, beat together into an uniform mass of the consistence of honey; as conserve of hips, orange peel, &c. Conserves are called confections in the last edition of the London Pharmacopœia. See *Confectio.*

CONSE'RVA ABSI'NTHII MARI'TIMI. See *Artemisia maritima.*

CONSE'RVA A'RI. This is occasionally exhibited as a stimulant and diuretic. See *Arum.*

CONSE'RVA AURA'NTII HISPALE'NSIS. See *Confectio aurantiorum.*

CONSE'RVA CYNO'SBATI. See *Confectio rosæ caninæ.*

CONSE'RVA LU'JULÆ. A preparation of wood-sorrel, possessing acid, cooling, and antiseptic qualities. See *Oxalis acetosella.*

Conse′rva men′thæ. This preparation of mint is given occasionally as a stomachic, in sickness and weakness of the stomach. See *Mentha viridis*.

Conse′rva pru′ni sylve′stris. Astringent virtues are ascribed to this medicine, which is now seldom used but in private formulæ.

Conse′rva ro′sæ. This conserve, rubbed down with water, to which is added some lemon-juice, forms an excellent drink in hæmorrhagic complaints. See *Confectio rosæ gallicæ*.

Conse′rva sci′llæ. A preparation of squills, which affords an excellent basis for an electuary, possessing expectorant and diuretic qualities.

Consiste′ntia. (From *consisto*, to abide.) The state or acme of a disease. The appearance or state of the humours and excrements.

Conso′lida. (So called, *quia consolidandi et conglutinandi vi pollet*; from its power and use in agglutinating and joining together things broken.) Comfrey.

Conso′lida au′rea. *Aurea cordis*. A name of the chamæcistus.

Conso′lida ma′jor. See *Symphytum*.

Conso′lida me′dia. See *Ajuga pyramidalis*.

Conso′lida mi′nor. See *Prunella*.

Conso′lida rega′lis. See *Delphinium consolida*.

Conso′lida sarace′nica. See *Solidago virga aurea*.

Consound. See *Symphytum*.

Consound middle. See *Ajuga pyramidalis*.

CONSTANTI′NUS, Africanus, was born at Carthage, towards the middle of the 11th century. He lived near 40 years at Babylon, and was celebrated for his knowledge of the Eastern languages. Among the sciences, medicine appears to have principally occupied his attention; and two of his works were thought deserving of being printed at Bâle, about 4½ centuries after his death, which occurred in 1087. They are thought however to have been chiefly translated from Arabian writers.

CONSTIPATION. (From *constipo*, to crowd together.) *Obstipatio*. A person is said to be costive when the alvine excrements are not expelled daily, and when the fæces are so hardened as not to receive their form from the impression of the rectum upon them.

Constricti′va. (From *constringo*, to bind together.) Styptics.

CONSTRI′CTOR. (From *constringo*, to bind together.) A name given to those muscles which contract any opening of the body.

Constri′ctor a′læ na′si. See *Depressor labii superioris alæque nasi*.

Constri′ctor a′ni. See *Sphincter ani*.

CONSTRI′CTOR I′STHMI FAU′CIUM. *Glosso-staphilinus* of Winslow, Douglas, and Cowper; and *Glosso staphilin* of Dumas. A muscle situated at the side of the entry of the fauces, that draws the *velum pendulum palati* towards the root of the tongue, which it raises at the same time, and with its fellow contracts the passage between the two arches, by which it shuts the opening of the fauces.

Constri′ctor labio′rum. See *Orbicularis oris*.

Constri′ctor mu′sculus. See *Buccinator*.

Constri′ctor o′ris. See *Orbicularis oris*.

Constri′ctor palpebra′rum. See *Orbicularis palpebrarum*.

CONSTRI′CTOR PHARY′NGIS INFE′RIOR. *Crico-pharyngeus*. *Thyro-pharyngeus* of Douglas and Winslow. *Crico-thyropharyngien* of Dumas. A muscle situated on the posterior part of the pharynx. It arises from the side of the thyroid cartilage, near the attachment of the sterno-hyoideus and thyro-hyoideus muscles; and from the cricoid cartilage, near the crico-thyroideus; it is inserted into the white line, where it joins with its fellow, the superior fibres running obliquely upwards, covering nearly one-half of the middle constrictor, and terminating in a point: the inferior fibres run more transversely, and cover the beginning of the œsophagus. Its use is to compress that part of the pharynx which it covers, and to raise it with the larynx a little upwards.

CONSTRI′CTOR PHARY′NGIS ME′DIUS. *Hyo-pharyngeus* and *cephalo-pharyngeus* of Douglas and Winslow. *Chondro-pharyngeus* of Douglas. *Syndesmo-pharyngeus* of Winslow. *Cephalo-pharyngeus* of Winslow and Douglas. *Hyo-glosso basi pharyngien* of Dumas. A muscle situated on the posterior part of the pharynx. It arises from the appendix of the os hyoides, from the cornu of that bone, and from the ligament which connects it to the thyroid cartilage; the fibres of the superior part running obliquely upwards, and covering a considerable part of the superior constrictor, terminate in a point; and it is inserted into the middle of the cuneiform process of the os occipitis, before the foramen magnum, and joined to its fellow at a white line in the middle part of the pharynx. This muscle compresses that part of the pharynx which it covers, and draws it and the os hyoides upwards.

CONSTRI′CTOR PHARY′NGIS SUPE′RIOR. *Glosso-pharyngeus*. *Mylo-pharyngeus*. *Pterygo-pharyngeus* of Douglas and Winslow, and *Pterigo syndesmo staphili pharyngien* of Dumas. A muscle situated on the posterior part of the pharynx. It arises above, from the cuneiform process of the os occipitis, before the foramen magnum, from the pterygoid process of the sphenoid bone, from the upper and under jaw, near the roots of the last dentes molares, and between the jaws. It is inserted in the middle of the pharynx. Its use is to compress the upper part of the pharynx, and to draw it forwards and upwards.

Constri′ctor vesi′cæ urina′riæ. See *Detrusor urinæ*.

Constricto′res pharyngæ′i. Muscles of the œsophagus.

Constricto′rii. Diseases attended with constriction, or spasmodic diseases.

CONSTRINGE′NTIA. (From *constringo*, to bind together.) Astringent medicines.

CONSUMPTION. (From *consumo*, to waste away.) See *Phthisis*.

Contabesce′ntia. (From *contabesco*, to pine or waste away.) An atrophy, or nervous consumption.

CONTAGION. (From *contingo*, to meet or touch each other.) *Effluvia*. *Miasma*. *Virus*. *Lues*. Infection. The very subtile particles arising from putrid substances, or from persons labouring under contagious diseases, which communicate the disease to others; as the contagion of putrid fever, the effluvia of dead animal or vegetable substances, the miasm of bogs and fens, the virus of small-pox, lues venerea, &c. &c. There does not appear to be any distinction commonly made between contagious and infectious diseases. Would it not be proper to apply the term *contagious* to those which are communicated by contact only, as the venereal disease, itch, &c.; and *infectious*, to those which may be caught through the medium of the atmosphere, &c. without contact, as putrid fever, &c.

Conte′nsio. (From *contineo*, to restrain.) It is sometimes used to express a tension or stricture.

Co′ntinens fe′bris. A continent fever, which proceeds regularly in the same tenor, without either exacerbation or remission. This rarely if ever happens.

Conti′nua fe′bris. (From *continuo*, to persevere.) A continued fever. See *Febris continua*.

Conto′rsio. (From *contorqueo*, to twist about.) A contortion, or twisting. In medicine this word has various significations, and is applied to the Iliac passion, to luxation of the vertebræ, head, &c.

Contra-apertu′ra. (From *contra*, against, and *aperio*, to open.) A counter-opening. An opening made opposite to the one that already exists.

CONTRACTILITY. A property in bodies, the effect of the cohesive power, by which their particles resume their former propinquity when the force ceases which was applied to separate them. It also denotes the power, which muscular fibres possess of shortening themselves.

CONTRACTION. (From *contraho*, to draw together.) *Contractura*. *Beriberia*. A rigid contraction of the joints. It is a genus of disease in the class *locales*, and order *dyscinesiæ* of Cullen. The species are,

1. *Contractura primaria*, from a rigid contraction of the muscles, called also obstipitas; a word that, with any other annexed, distinguishes the variety of the contraction. Of this species he forms four varieties. 1. *Contractura ab inflammatione*, when it arises from inflammation. 2. *Contractura à spasmo*, called also tonic spasm and cramp, when it depends upon spasm. 3. *Contractura ob antagonistas paraliticos*, from the antagonist muscles losing their action. 4. *Contractura ab acrimoniâ irritante*, which is induced by some irritating cause.

2. *Contractura articularis*, originating from a disease of the joint.

Contrafissu′ra. (From *contra*, against, and *findo*, to cleave.) A crack in the skull, opposite to the part on which the blow was given.

Contrahe′ntia. (From *contraho*, to contract.) Medicines which shorten and strengthen the fibres. Astringents are the only medicines of this nature.

CONTRA-INDICATION. (*Contra-indicatio*; from *contra*, against, and *indico*, to shew.) A symptom attending a disease, which forbids the exhibition of a remedy which would otherwise be employed; for instance, bark and acids are usually given in putrid fevers; but if there be difficulty of breathing, or inflammation of any viscus, they are contra-indications to their use.

Contra-luna′ris. (From *contra*, and *luna*, the moon.) An epithet given by Dietericus to a woman who conceives during the menstrual discharge.

Contra-semen. See *Artemisia Santonica*.

CONTRE COUP. (French.) A species of fracture of the skull, called in Latin *contra-fissura*, in which the fracture happens in the part opposite to where the blow was received.

Contraye′rvæ ra′dix. See *Dorstenia Contrayerva*.

CONTRAYE′RVA. (From *contra*, against, and *yerva*, poison. Span. *i. e.* a herb good against poison.) See *Dorstenia*.

Contraye′rva a′lba. *Contrayerva Germanorum*. A name for asclepias.

Contraye′rva no′va. Mexican contrayerva. This is the root of the *Psoralea pentaphylla* of Linnæus. It was introduced into Europe after the former, and is brought from Guiana as well as from Mexico. It is but little if any thing inferior to contrayerva.

Contraye′rva Virginia′na. See *Aristolochia Serpentaria*.

Contritio. The same as comminution.

CONTUSION. (From *contundo*, to knock together.) A bruise, or contused wound.

CONVALESCENCE. That space from the departure of a disease, to the recovery of the strength lost by it.

CONVALLA'RIA. (From *convallis,* a valley; named from its abounding in valleys and marshes.) The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.*

Convalla'ria maja'lis. The systematic name of the lily of the valley. *Lilium convallium. Convallaria. Maianthemum.* May-lily. The flowers of this plant. *Convallaria majalis; — scapo nudo* of Linnæus, have a penetrating bitter taste, and are given in nervous and catarrhal disorders. When dried and powdered, they prove strongly purgative. Watery or spirituous extracts made from them, given in doses of a scruple or drachm, act as gentle stimulating aperients and laxatives; and seem to partake of the purgative virtue, as well as the bitterness of aloes. The roots, in the form of tincture, or infusion, act as a sternutatory when snuffed up the nose, and as a laxative or purgative when taken internally.

Convalla'ria polygona'tum. The systematic name of Solomon's seal. *Sigillum Salomonis. Convallaria polygonatum; foliis alternis amplexicaulibus, caule ancipiti, pedunculis axillaribus subunifloris,* of Linnæus. The roots are applied externally as adstringents, and are administered internally as corroborants.

Convolu'ta superio'ra o'ssa. The superior turbinated bones of the nose.

Convolu'ta inferio'ra o'ssa. The lower turbinated bones of the nose.

CONVO'LVULUS. (From *convolvo,* to roll together.)

1. A name for the Iliac passion.
2. The name of a genus of plants in the Linnæan system, so called from their twisting round others. Class, *Pentandria.* Order, *Monogynia,* which affords the Jalapa, mechoacana, turbith, and scammony. The whole genus consists of plants containing a milky juice strongly cathartic and caustic.

Convo'lvulus America'nus. The jalap root.

Convo'lvulus canta'brica. A name for the cantabrica. *Convolvulus minimus spicæ foliis. Convolvulus linariæ folio. Convolvulus Cantabrica* of Linnæus. Lavender-leaved bind-weed. Pliny says it was discovered in the time of Augustus, in the country of the Cantabri in Spain; whence its name. It is anthelmintic and actively cathartic.

Convo'lvulus colubri'nus. The pariera brava.

Convo'lvulus jala'pa. The systematic name of the jalap plant. *Jalapium. Mechoacanna nigra.* Jalap. The plant is thus described by Linnæus. *Convolvulus jalapa: caule volubili; foliis ovatis, subcordatis, obtusis, obsolete repandis, subtus villosis; pedunculis unifloris.* It is a native of South America. In the shops, the root is found both cut into slices and whole, of an oval shape, solid, ponderous, blackish on the outside, but grey within, and marked with several dark veins, by the number of which, and by its hardness, heaviness, and dark colour, the goodness of the root is to be estimated. It has scarcely any smell, and very little taste, but to the tongue, and to the throat, manifests a slight degree of pungency. The medicinal activity of jalap resides principally, if not wholly, in the resin, which, though given in small doses, occasions violent tormina. The root powdered is a very common, efficacious, and safe purgative, as daily experience evinces; but, according as it contains more or less resin, its effects must of course vary. In large doses, or when joined with calomel, it is recommended as an anthelmintic and hydragogue. In the pharmacopœias, this root is ordered in the form of tincture and extract; and the Edinburgh College directs it also in powder, with twice its weight of crystals of tartar.

Convo'lvulus ma'jor a'lbus. See *Convolvulus sepium.*

Convo'lvulus mari'timus. The brassica maritima, or sea colewort.

Convo'lvulus mechoacan. *Mechoacannæ radix. Jalappa alba. Rhabarbarum album.* Mechoacan. The root of a species of convolvulus, *Convolvulus Mechoacan,* or *Bryonia alba Peruviana,* is brought from Mexico. It possesses aperient properties, and was long used as the common purge of this country, but is now wholly superseded by jalap.

Convo'lvulus scammo'nia. The systematic name of the scammony plant. *Scammonium. Convolvulus syriacus. Scammonium syriacum. Diagrydium.* Scammony. The plant which affords the concrete gummi-resinous juice termed scammony is the *Convolvulus scammonia; foliis sagittatis postice truncatis, pedunculis teretibus subtrifloris,* of Linnæus. It grows plentifully about Maraash, Antioch, Edlib, and towards Tripoli, in Syria. No part of the dried plant possesses any medicinal quality, but the root, which Dr. Russel administered in decoction, and found it to be a pleasant and mild cathartic. It is from the milky juice of the root that we obtain the officinal scammony, which is procured in the following manner by the peasants, who collect it in the beginning of June. Having cleared away the earth from about the root, they cut off the top in an oblique direction, about two inches below where the stalks spring from it. Under the most depending part of the slope, they fix a shell, or some other convenient receptacle, into which the milky juice gradually flows. It is left there about twelve hours, which time is sufficient for draining off the whole juice; this, however, is in small quantity, each root affording but a very few drachms. This juice from the several roots is put together, often into the leg of an old boot, for want of some more proper vessel, where, in a little time, it grows hard, and is the genuine scammony. The smell of scammony is rather unpleasant, and the taste bitterish and slightly acrid. The different proportions of gum and resin, of which it consists, have been variously stated; but, as proof spirit is the best menstruum for it, these substances are supposed to be nearly in equal parts. It is brought from Aleppo and Smyrna in masses, generally of a light shining gray colour, and friable texture; of rather an unpleasant smell, and bitterish and slightly acrid taste. The scammony of Aleppo is by far the purest. That of Smyrna is ponderous, black, and mixed with extraneous matters. Scammony appears to have been well known to the Greek and Arabian physicians, and was exhibited internally as a purgative, and externally for the itch, tinea, fixed pains, &c. It is seldom given alone, but enters several compounds, which are administered as purgatives.

Convo'lvulus se'pium. *Convolvulus major albus.* The juice of this plant, *Convolvulus sepium; foliis sagittatis postice truncatis pedunculis tetragonis, unifloris,* of Linnæus, is violently purgative, and given in dropsical affections. A poultice of the herb, made with oil, is recommended in white swellings of the knee joint.

Convo'lvulus soldane'lla. The systematic name of the sea convolvulus. *Brassica marina.* *Κραμϐη ϑαλασσια.* *Convolvulus maritimus.* *Soldanella.* Soldanella. This plant, *Convolvulus soldanella; foliis reniformibus, pedunculis unifloris,* of Linnæus, is a native of our coasts. The leaves are said to be a drastic purge. It is only used by the common people, the pharmacopœias having now substituted more safe and valuable remedies in its place.

Convo'lvulus Syri'acus. A name for the scammonium.

Convo'lvulus turpe'thum. The systematic name of the turbith plant. *Turpethum.* The cortical part of the root of a species of convolvulus, brought from the East Indies, in oblong pieces: it is of a brown or ash colour on the outside, and whitish within. The best is ponderous, not wrinkled, easy to break, and discovers to the eye a large quantity of resinous matter. When chewed, it at first imparts a sweetish taste, which is followed by a nauseous acrimony. It is considered as a purgative, liable to much irregularity of action.

CONVULSION. (*Convulsio*; from *convello*, to pull together.) *Hieranosos. Distentio nervorum.* Clonic spasm. A diseased action of muscular fibres, known by alternate relaxations, with violent and involuntary contractions of the muscular parts, without sleep. Cullen arranges convulsion in the class *neuroses,* and order *spasmi.* Convulsions are universal or partial, and have obtained different names, according to the parts affected, or the symptoms; as the *risus sardonicus,* when the muscles of the face are affected; St. Vitus's dance, when the muscles of the arm are thrown into involuntary motions, with lameness and rotations. The hysterical epilepsy, or other epilepsies, arising from different causes, are convulsive diseases of the universal kind: the muscles of the globe of the eye, throwing the eye into involuntary distortions in defiance of the direction of the will, are instances of partial convulsion. The muscles principally affected in all species of convulsions, are those immediately under the direction of the will; as those of the eyelids, eye, face, jaws, neck, superior and inferior extremities. The muscles of respiration, acting both voluntarily and involuntarily, are not unfrequently convulsed; as the diaphragm, intercostals, &c. The more immediate causes of convulsions are, 1. Either mental affection, or any irritating cause exciting a greater action in the arterial system of the brain and nerves. 2. An increase of nervous energy, which seems to hold pace or be equi potent with the increased arterial energy excited in the brain. 3. This increased energy, conveying its augmented effects, without the direction of the will, to any muscles destined to voluntary motion, over-irritates them. 4. The muscles, irritated by the increased nervous energy and arterial influx, contract more forcibly and involuntarily by their excited vis insita, conjointly with other causes, as long as the increased nervous energy continues. 5. This increased energy in the nervous system may be excited either by the mind, or by any acrimony in the blood, or other stimuli sufficiently irritating to increase the arterial action, nervous influence, and the vires insitæ of muscles. 6. After muscles have been once accustomed to act involuntarily, and with increased action, the same causes can readily produce the same effects on those organs. 7. All parts that have muscular fibres may be convulsed. 8. The sensations in the mind most capable of producing convulsions, are timidity, horror, anger, great sensibility of the soul, &c.

Convu'lsio abdo'minis. Convulsion of the muscles of the belly.

Convu'lsio cani'na. A wry mouth.

Convu'lsio cerea'lis. Cereal convulsion is a singular disorder of the spasmodic convulsive kind, not common to this country, but mentioned by Cartheuser under this title, from the peculiar tingling and formication perceived in the arms and legs. *Motus spasmodicus* of Hoffman. It is endemial in some places in Germany, but more a rural than urbanical disorder, said to arise from the use of spoiled corn.

Convu'lsio clo'nica. Convulsion with alternate relaxation.

Convu'lsio gravida'rum. Convulsion of pregnant women.

Convu'lsio habitua'lis. The chorea Sancti Viti.

Convu′lsio hemito′tonos. Convulsion approaching to tetanus.

Convu′lsio ab inani′tione. Convulsion from inanition.

Convu′lsio i′ndica. Tetanus.

Convu′lsio intermi′ttens. Convulsion occurring in paroxysms.

Convu′lsio nephra′lgica. Convulsion from stones in the kidneys.

Convu′lsio ab onani′smo. Convulsion from self-pollution.

Convu′lsio rapha′nia. Spasmodic painful disease of the joints.

Convu′lsio to′nica. Common or permanent convulsion.

Convu′lsio u′teri. Abortion.

CONY′ZA. (From κονις, dust; because its powder is sprinkled to kill fleas in places where they are troublesome.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*. There is some difficulty in ascertaining the plants called conyzas by the older practitioners: they are either of the genus conyza, inula, gnaphalium, erigeron, or chrysocoma.

Cony′za æthio′pica. The plant so called is most probably the chrysocoma comaurea of Willdenow, a shrub which grows wild about the Cape of Good Hope, and is cultivated in our green-houses, because it flowers the greater part of the year.

Cony′za cœru′lea. The Erigeron acre of Linnæus answers to the description of this plant.

Cony′za ma′jor. Supposed to be the inula viscosa of Linnæus.

Cony′za me′dia. See *Inula dysenterica*.

Cony′za ma′jor vulga′ris. The Inula dysenterica.

Cony′za minor. The Inu′la pulicaris of Linnæus answers to the description given of this plant in most books. Its chief use is to destroy fleas and knats.

Conyza minor flore globoso. This is the inula pulicaris of Linnæus.

Cooperto′ria. (From *co operio*, to cover over.) Cartilago thyroidea. Called also abicum.

Coo′strum. The centre of the diaphragm.

COPA′IBA. (*Copaiba, -æ*, fœm. from *copal*, the American name for any odoriferous gum, and *iba*, or *iva*, a tree.) The name given by the College of Physicians of London to the balsam of copaiva. *Balsamum Braziliense. Balsamum copaibæ. Balsamum de copaibu. Balsamum capivi.*

Copaiba is a yellow resinous juice, of a moderately agreeable smell, and a bitterish biting taste, very permanent on the tongue. The tree which affords it is the *Copaifera officinalis* of Linnæus. It is obtained by making deep incisions near its trunk, when the balsam immediately issues, and, at the proper season, flows in such abundance, that sometimes, in three hours, twelve pounds have been procured. The older trees afford the best balsam, and yield it two or three times in the same year. The balsam supplied by the young and vigorous trees, which abound with the most juice, is crude and watery, and is, therefore, accounted less valuable. While flowing from the tree, this balsam is a colourless fluid; in time, however, it acquires a yellowish tinge, and the consistence of oil; but, though by age it has been found thick, like honey, yet it never becomes solid, like other resinous fluids. By distillation in water, the oil is separated from the resin; and, in the former, the taste and smell of the balsam are concentrated. If the operation is carefully performed, about one-half of the balsam rises into the receiver, in the form of oil. The balsam unites with fixed and volatile oils, and with spirit of wine. It is given in all diseases of the urinary organs, when no inflammation is present. In gleets, and in gonorrhœa, it was once a favourite remedy, but is now disused. In diseases of the kidneys it is still employed, though less frequently than usual; and in hæmorrhoids it is occasionally trusted. The dose is from 20 to 30 drops, twice or three times a day, mixed with water, by means of an egg, or any mucilage. The balsam of copaiva is occasionally adulterated with turpentine, but its virtues are not greatly injured by the fraud.

Copaiva. See *Copaiba*.

COPAI′FERA. (From *Copaiva*, the Indian name, and *fero*, to bear.) The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Monogynia*.

Copai′fera officina′lis. The systematic name of the plant from which the Copaiva balsam is obtained.

COPAL. (The American name of all clear odoriferous gums.) Gum copal. This resinous substance is imported from Guinea, where it is found in the sand on the shore. It is of a yellow colour, faintly glistening, imperfectly transparent, and apt to break with a conchoidal fracture. It is tasteless, and, while cold, inodorous. It is used, dissolved in rectified spirit of wine, in laxities of the gums, with the same views as mastich.

Cope′lla. See *Cupel*.

Co′pher. A name for camphor.

Co′phos. (Κωφος, dumb.) Deaf or dumb. Also a dulness in any of the senses.

COPHO′SIS. (From κωφος, deaf.) A difficulty of hearing. It is often symptomatic of some disease. See *Dysecoea*.

COPPER, (*Cuprum, i.* neut. *quasi æs Cyprium;* so named from the island of Cyprus, whence it was formerly brought.) A metal found in the earth, in various states. It is found native, (*native copper*,) possessing the red colour, malleability, and many of its other properties; it is, however, not quite pure, but generally mixed with a minute portion of gold, or silver.

This ore is found of an indeterminate figure, in solid and compact masses; in crystals, mostly cubical; sometimes in plates and threads, which assume a variety of forms. It then is flexible. It has much metallic lustre. It is found in many parts of Europe.

Copper ores are very numerous. Copper combined with oxygen, forms *oxide of copper*, of a red or sometimes black colour. United to carbonic acid, it constitutes the blue and green copper ores, (*mountain blue, mountain green*,) &c. The compact ore of this kind is termed *malachite*. It generally exhibits a very fine grass-green, emerald-green, or apple-green colour. It is found in solid masses of an indeterminate shape. It has often a beautiful sattin-like appearance, or silky lustre.

Copper also exists mineralized by the muriatic acid, sulphuric acid, arsenic acid, &c. Copper mineralized with sulphur is called *vitreous copper ore*. Its colour is generally lead-grey. Combined with sulphur and iron, it forms all the varieties of copper pyrites. Mineralized with sulphur, arsenic, iron, and zinc, it constitutes the *brown* or *blendose copper ores*, of which there are many varieties. Copper mines are abundant in Britain, Germany, &c.

Properties of Copper.—Pure copper is of a rose-red colour, very sonorous, very tenacious, ductile, and malleable; of a considerable compactness; moderately hard and elastic. Its texture is granulated, and subject to blisters. It crystallizes in quadrilateral pyramids. Its specific gravity is between between 7.788 and 8.584. When rubbed, it emits a disagreeable odour. It melts at 27° of Wedgwood's pyrometer. At a higher temperature, it burns with a beautiful green flame. It is a good conductor of caloric, of electricity, and of galvanism. Exposed to the air it becomes brown, and at last green, by absorbing carbonic acid. When heated, it turns blue, yellow, violet, and brown. It readily fuses with phosphorus and unites to sulphur, when finely divided by mere trituration. It does not decompose water at the temperature of ignition. It is acted on by the greater number of the acids. Nitric acid acts on copper with great vehemence. Sulphuret of potash combines with it in the dry and in the humid way. It is capable of alloying with the greater number of the metals. With zinc it forms the compound metals called brass, pinchbeck, and others: with tin it forms bell-metal and bronze. It unites to the earths merely in vitrification. Liquid ammonia causes it to oxidize quickly when air is admitted. It decomposes muriate of ammonia, and red sulphuret of mercury, by heat. It is poisonous to the human constitution.

Method of obtaining Copper.— Copper is procured from its ores, by different processes, according to the nature of those ores. If they contain much sulphur, after being pounded and washed, they are roasted in the open air to dispel the sulphur. The ore is afterwards roasted once or twice more, and is melted in an open fire into a mass, called a mat of copper. In this state it still contains a large quantity of sulphur, which the workmen continue to expel by repeated roastings and fusion, till the metal acquires a certain degree of purity, and is called black copper, which is somewhat malleable, but still contains sulphur, iron, and in general some other impurities. In order to get entirely rid of these, the copper is hastily fused with three times its weight of lead. The lead unites with the copper, and expels the iron; and the rest of the metals which happen to be mixed with the copper are thus expelled. The copper is afterwards refined by keeping it heated in crucibles for a considerable time, so that it may throw up all the foreign substances it still contains in the form of scoriæ. It is examined from time to time by immersing iron rods into it, which become covered with a small quantity of copper, and its purity is judged of by the brilliant redness of these specimens.

Co'pperas. A name given to blue, green, and white vitriol.

Coprago'ga. (From κοπρος, dung, and αγω, to bring away.) *Copragogum.* The name of a gently purging electuary, mentioned by Rulandus.

Coprie'mesis. (From κοπρος, excrement, and εμεω, to vomit.) A vomiting of fæces.

Coprocri'tica. (From κοπρος, excrement, and κρινω, to separate.) Mild cathartic medicines.

Coproph'oria. (From κοπρος, excrement, and φορεω, to bring away.) A purging.

Co'pros. (Κοπρος.) The fæces, or excrements.

Coprosta'sia. (From κοπρος, fæces, and ιϛημι, to remain.) Costiveness, or a constriction of the belly.

Copta'riom. (Κοπτη, a small cake.) *Coptarium.* A medicine in the shape of a very small cake, directed for disorders of the aspera arteria and lungs, and for many other intentions, by the antients.

Co'pte. (Κοπτη, a small cake.) It was the form of a medicine used by the antients; also a cataplasm generally made of vegetable substances, and applied externally to the stomach, and internally on many occasions.

Co'pula. (*Quasi compula*; from *compello*, to restrain.) A name for a ligament.

Coque'ntia. (From *coquo*, to digest.) Medicines which promote concoction.

COR. (*Cordis*, neut.)

1. The heart. See *Heart*.
2. Gold.
3. An intense fire.

Coraci'ne. (From κοραξ, a crow; so named from its black colour.) A name for a lozenge, quoted by Galen from Asclepiades.

CORACO-BRACHIA'LIS. (From κοραξ, a crow, and βραχιον, the arm.) *Coraco-humeral* of Dumas. *Coraco-brachiæus.* A muscle, so called from its origin and insertion. It is situated on the humerus, before the scapula. It arises, tendinous and fleshy, from the fore-part of the coracoid process of the scapula, adhering, in its descent, to the short head of the biceps; inserted, tendinous and fleshy, about the middle of the internal part of the os humeri, near the origin of the third head of the triceps, called *brachialis externus,* where it sends down a thin, tendinous expansion to the internal condyle of the os humeri. Its use is to raise the arm upwards and forwards.

CORACO-HYOIDE'US. (*Coraco-hyoideus,* sc. *musculus,* κορακο-υοιδαιος: from κοραξ, a crow, and υοειδης, the bone called *hyoides.*) See *Omo-hyoideus.*

CO'RACOID. (*Coracoideus;* from κοραξ, a crow, and ειδος, resemblance; because it is shaped like the beak of a crow.) A name given to a process on the upper and anterior part of the scapula.

Côral. See *Corallium.*

CORALLI'NA. (Dim. of *corallium;* from κορη, a daughter, and αλς, the sea; because it is generated in the sea.) *Muscus maritimus.* *Corallina officinalis.* *Corallina alba.* Sea coralline, and white wormseed. A marine production, resembling a small plant without leaves, consisting of numerous brittle cretaceous substances, friable betwixt the fingers, and crackling between the teeth. Powdered, it is administered to children as an anthelmintic.

Coralli'na corsica'na. *Helmintho-corton.* *Conferva helmintho-cortos.* *Corallina rubra.* *Corallina melito-corton.* *Lemitho-corton.* Corsican worm-weed. *Fucus helmintho-corton* of De la Tourrette. This plant has gained great repute in destroying all species of intestinal worms. Its virtues are extolled by many; but impartial experimentalists have frequently been disappointed of its efficacy. The Geneva Pharmacopœia directs a syrup to be made of it.

Coralli'na melito-co'rton. See *Corallina corsicana.*

Coralli'na ru'bra. See *Corallina corsicana.*

Coralline. See *Corallina.*

Coralline, Corsican. See *Corallina Corsicana.*

Cora'llium a'lbum. A hard, white, calcareous, brittle substance; the nidus of the *Madrepora oculata.* Class, *Vermes.* Order, *Lithophyta.* It is sometimes exhibited as an absorbent earth.

CORA'LLIUM RU'BRUM. (From κορη, a daughter, and αλς, the sea; so named because it is generated in the sea.) *Acmo.* *Azur.* The red coral is mostly employed medicinally. It is a hard, brittle, calcareous substance, resembling the stalk of a plant, and is the habitation of the *Isis nobilis.* Class, *Vermes.* Order, *Zoophyta.* When powdered, it is exhibited as an absorbent earth to children; but does not appear to claim any preference to common chalk.

Corallode'ndron. (From κοραλλιον, coral, and δενδρον, a tree; resembling in hardness and colour a piece of coral.) The coral-tree of America; antivenereal.

Coralloi'des se'ptfoil. Tooth or coralwort; corroborant.

Coralloi'des fu'ngus. (From κοραλλιον, coral, and ειδος, likeness.) *Erotylus.* *Clavaria coralloides* of Linnæus. It is said to be corroborant and astringent.

Co'rchoron. (From κορη, the pupil of the eye, and κορεω, to purge; so called because it was thought to purge away rheum from the eyes.) The herb pimpernel, or chickweed.

Co'rda. See *Chordee.*

CO'RDA TY'MPANI. The portio dura of the seventh pair of nerves, having entered the tympanum, sends a small branch to the stapes, and another more considerable one, which runs across the tympanum from behind forwards, passes between the long leg of the incus and the handle of the malleus, then goes out at the same place where the tendon of the anterior muscle of the malleus enters. It is called corda tympani, because it crosses the tympanum as a cord crosses the bottom of a drum. Dr. Monro thinks, that the corda tympani is formed by the second branch of the fifth pair, as well as by the portio dura of the seventh.

CO'RDÆ WILLI'SII. See *Dura mater.*

CORDIALS. Medicines are generally so termed, which possess warm and stimulating properties, and that are given to raise the spirits.

Co'rdia my'xa. *Sebestina.* The systematic name of the Sebesten plant. *Sebesten.* Sebsten. The dark black fruit of the *cordia; foliis ovatis, supra glabris; corymbis lateralibus; calycibus decemstriatis* of Linnæus. It possesses glutinous and aperient qualities, and is exhibited in form of decoction in various diseases of the chest, hoarseness, cough, difficult respiration, &c.

Cordine'ma. (From καρα, the head, and δινεω, to move about.) A head-ache attended with a vertigo.

Cordo'lium. (From *cor,* the heart, and *dolor,* pain.) A name formerly applied to cardialgia, or heart-burn.

CORDUS, Valerius, was born in 1515, of a Hessian family. After studying in some of the German universities, he travelled through Italy, chiefly engaged in botanical researches. He died at the early age of 29, leaving several works; a "History of Plants," many of them never before described; "Annotations on Dioscorides;" a Nuremberg Dispensatory, &c.

Co′re. (Κορη.) The pupil of the eye.

Core′mata. (From κορεω, to cleanse.) Medicines for cleansing the skin.

Coriander. See *Coriandrum.*

CORIA′NDRUM. (From κορη, a pupil, and ανηρ, a man; because of its roundness, like the pupil of a man's eye; or probably so called from κορις, *cimex*, a bug, because the green herb, seed and all, stinks intolerably of bugs.) Coriander.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

2. The pharmacopœial name of the officinal coriander. See *Coriandrum sativum*.

Cori′andrum sati′vum. The systematic name of the plant called *coriandrum* in the pharmacopœias. *Cassibor. Corianon.* The *Coriandrum fructibus globosis*, of Linnæus. This plant is a native of the South of Europe, where, in some places, it is said to grow in such abundance as frequently to choke the growth of wheat and other grain. From being cultivated here as a medicinal plant, it has for some time become naturalized to this country, where it is usually found in corn fields, the sides of roads, and about dunghills. Every part of the plant, when fresh, has a very offensive odour, but, upon being dried, the seeds have a tolerably grateful smell, and their taste is moderately warm and slightly pungent. They give out their virtue totally to rectified spirit, but only partially to water. In distillation with water, they yield a small quantity of a yellowish essential oil, which smells strongly and pretty agreeably of the coriander.

Dioscorides asserts, that the seeds, when taken in a considerable quantity, produce deleterious effects; and, in some parts of Spain and Egypt, where the fresh herb is eaten as a cordial, instances of fatuity, lethargy, &c. are observed to occur very frequently; but these qualities seem to have been unjustly ascribed to the coriander; and Dr. Withering informs us, that he has known six drachms of the seeds taken at once, without any remarkable effect. These seeds, and indeed most of those of the umbelliferous plants, possess a stomachic and carminative power. They were directed in the infusum amarum, the infusum sennæ tartarizatum, and some other compositions of the pharmacopœias; and, according to Dr. Cullen, the principal use of these seeds is, "that infused along with senna, they more powerfully correct the odour and taste of this than any other aromatic that I have employed, and are, I believe, equally powerful in obviating the griping that senna is very ready to produce."

Coria′non. See *Coriandrum.*

Co′ris. (From κειρω, to cleave, or cut; so called because it was said to heal wounds.) The herb hypericum.

Co′ris lu′tea. *Coris legitima cretica.* The hypericum saxatile, or bastard St. John's wort.

Co′ris monspelie′nsis. This plant is intensely bitter and nauseous, but apparently, an active medicine, and employed, it is said, with success in syphilis.

CORK. The bark of the *Quercus suber* of Linnæus, formerly employed as an astringent, but now disused. It affords an acid.

CORN. *Clavus.* A hardened portion of cuticle, produced by pressure: so called because a piece can be picked out like a corn of barley. Corns are sometimes connected with the periosteum.

Cornachi′ni pu′lvis. Scammony, antimony, and cream of tartar.

CORNARIUS, John, was born in Upper Saxony, in the year 1500. According to Haller his real name was Haguenbot, or Hanbut. He is said to have been led to the study of medicine from the delicacy of his own constitution. He graduated at Padua, after attending several other universities. Besides translating Hippocrates, and some other Greek writers into Latin, he was author of several works on medicine; and is said to have had an extensive practice. He died in 1558, leaving a son, Diomede, who succeeded him, and was afterwards professor of medicine at Vienna, and physician to Maximilian II.

CORNARO, Lewis, of a noble Venetian family, was born in 1467. Having impaired his constitution by a debauched and voluptuous life, and brought on at last a severe illness, on recovering from this, at the age of more than 40, he adopted a strict, abstemious regimen, limiting himself to twelve ounces of solid food, and fourteen of wine, daily; which quantity he rather diminished in the latter part of his life. He carefully avoided also the extremes of heat or cold, with all violent exercise; and took care to live in a pure dry air. He thus preserved a considerable share of health and activity to the great age of 98. His wife, by whom he had an only child, a daughter, when they were both advanced in years, survived him, and attained nearly the same period. When he was 83, he published a short treatise in commendation of temperance, which has been repeatedly translated, and printed in every country of Europe. He then states himself to have been able to mount his horse, without assistance, from any rising ground. He wrote three other discourses on similar subjects at subsequent periods, the last only three years before his death. The best English translation is said to be that of 1779.

CO'RNEA OPA'CA. The sclerotic membrane of the eye is so called, because it is of a horny consistence and opake. See *Sclerotic coat*.

CO'RNEA TRANSPA'RENS. *Sclerotica ceratoides*. The transparent portion of the sclerotic membrane, through which the rays of light pass, is so called, to distinguish it from that which is opake. See *Sclerotic coat*.

Corne'sta. A chemical retort.

Cornflower. See *Centaurea Cyanus*.

Corni'cula. (From *cornu*, a horn.) A cupping instrument, made of horn.

Cornicula'ris. (From *cornu*, a horn.) Shaped like a horn; the coracoid process.

Corn-sallad. This is the *Valeriana locusta* of Linnæus. It is cultivated in our gardens, and eaten amongst the early sallads. It is a very wholesome succulent plant, possessing antiscorbutic and gently aperient virtues.

CO'RNU AMMO'NIS. *Cornu arietis*. When the pes hippocampi of the human brain is cut transversely through, the cortical substance is so disposed as to resemble a ram's horn. This is the true cornu ammonis, though the name is often applied to the *pes hippocampi*.

CO'RNU ARI'ETIS. See *Cornu ammonis*.

CO'RNU. *Cornu cervi*. Hartshorn. The horns of several species of stag, as the *cervus alces*, *cervus dama*, *cervus elaphus*, and *cervus taranda*, are used medicinally. Boiled, they impart to the water a nutritious jelly, which is frequently served at table. Hartshorn jelly is made thus:—Boil half a pound of the shavings of hartshorn, in six pints of water, to a quart; to the strained liquor add one ounce of the juice of lemon, or of Seville orange, four ounces of mountain wine, and half a pound of sugar; then boil the whole to a proper consistence. The chief use of the horns is for calcination, and to afford the *liquor volatilis cornu cervi* and sub-carbonate of ammonia.

Co'rnu ce'rvi calcina'tum. See *Cornu ustum*.

Co'rnu u'stum. Burn pieces of hartshorn in an open fire, till they become thoroughly white; then powder, and prepare them in the same manner, as is directed for chalk. Burnt hartshorn shavings possess absorbent, antacid, and adstringent properties, and are given in the form of decoction, as a common drink in diarrhœas, pyrosis, &c.

CO'RNUA. Warts. Horny excrescences, which mostly form on the joints of the toes. Similar diseased productions have been known to arise on the head, and other parts.

Co'rnua u'teri. *Plectenæ*. In comparative anatomy, the horns of the womb; the womb being in some animals triangular, and its angles resembling horns.

Cornumu'sa. A retort.

CO'RNUS. 1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Monogynia*.

2. The pharmacopœial name of the cornel-tree. *Cornus sanguinea* of Linnæus. The fruit is moderately cooling and astringent.

Cornu'ta. (From *cornu*; from its resemblance to a horn.) A retort.

Coro'na cilia'ris. The ciliar ligament.

CORO'NA GLA'NDIS. The margin of the glans penis.

Coro'na imperia'lis. A name for crown-imperial. The Turks use this plant as an emetic. The whole plant is considered poisonous.

Coro'na re'gia. The melilotus.

Coro'na so'lis. Sun-flower. Called also chimalati. The *Helianthus annuus* of Linnæus. It has been noticed as heating, and an agreeable food. The seeds are made into bread.

Coro'na ve'neris. Venereal blotches on the forehead are so termed.

CORO'NAL SU'TURE. (From *corona*, a crown, or garland; so named because the antients wore their garlands in its direction.) *Satura coronalis*. *Sutura arcualis*. The suture of the head, that extends from one temple across to the other, uniting the two parietal bones with the frontal.

Corona'rius stoma'chicus. Part of the eighth pair of nerves.

CORONARY VESSELS. *Vasa coronaria*. The arteries and veins of the heart; also others belonging to the stomach. The term coronary is here given from *corona*, a crown, surrounding any part in the manner of a crown.

CORONARY LIGAMENTS. (From *corona*, a crown.) Ligaments uniting the radius and ulna. The term ligamentum coronarium is also applied to a ligament of the liver.

CORO'NE. (Κορωνη, a crow; so named from its supposed likeness to a crow's bill.) The acute process of the lower jaw-bone.

CORONOID. (*Coronoideus*; from κορωνη, a crow, and ειδος, likeness.) Processes of bones are so called, that have any resemblance to a crow's beak, as *coronoides apophysis ulnæ*, *coronoides apophysis maxillæ*.

Corono'pus. (From κορωνη, a carrion crow, and πους, foot; the plant being said to resemble a crow's foot.) See *Plantago*.

CO'RPORA ALBICA'NTIA. Corpora albicantia Willisii.

CO'RPORA CAVERNO'SA CLITO'RIDIS. Two hollow crura, forming the clitoris.

CO'RPORA CAVERNO'SA PE'NIS. Two spongy bodies that arise, one from each ascending portion of the ischium, and form the whole bulk of the penis above the urethra, and terminate obtusely behind its glans. See *Penis*.

CO'RPORA FIMBRIA'TA. The

flattened terminations of the posterior crura of the fornix of the brain, which turn round into the inferior cavity of the lateral ventricle, and end in the *pedes hippocampi.*

Co′rpora lobo′sa. Part of the cortical part of the kidney.

Co′rpora nerveo-spongio′sa. The corpora cavernosa penis.

Co′rpora nervo′sa. The corpora cavernosa clitoridis.

CO′RPORA OLIVA′RIA. The two external prominences of the medulla oblongata, that are shaped somewhat like an olive.

CO′RPORA PYRAMIDA′LIA. Two internal prominences of the medulla oblongata, which are more of a pyramidal shape than the former.

CO′RPORA QUADRIGE′MINA. See *Tubercula quadrigemina.*

CO′RPORA STRIA′TA. So named from their appearance. See *Cerebrum.*

CO′RPUS ANNULA′RE. A synonym of pons Varolii. See *Pons Varolii.*

CO′RPUS. The body. Many parts and substances are also distinguished by this name: as *corpus callosum, corpus luteum,* &c. See also *Body.*

CO′RPUS CALLO′SUM. *Commissura magna cerebri.* The white medullary part joining the two hemispheres of the brain, and coming into view under the falx of the dura mater when the hemispheres are drawn from each other. On the surface of the *corpus callosum* two lines are conspicuous, called the *raphe.*

Co′rpus glandulo′sum. The prostate gland.

CO′RPUS LU′TEUM. The granulous papilla which is found in that part of the ovarium of females, from whence an ovum has proceeded; hence their presence determines that the female has been impregnated; and the number of the *corpora lutea* corresponds with the number of impregnations. It is, however, asserted by a modern writer, that *corpora lutea* have been detected in young virgins, where no impregnations could possibly have taken place.

Co′rpus muco′sum. See *Rete mucosum.*

CO′RPUS PAMPINIFO′RME. (*Pampiniformis;* from *pampinus,* a tendril, and *forma,* likeness, resembling a tendril.) *Corpus pyramidale.* Applied to the spermatic chord, and thoracic duct; also to the plexus of veins surrounding the spermatic artery in the cavity of the abdomen.

Co′rpus reticula′re. See *Rete mucosum.*

CO′RPUS SESAMOIDE′UM. A little prominence at the entry of the pulmonary artery.

CO′RPUS SPONGIO′SUM URE′THRÆ. *Substantia spongiosa urethræ. Corpus spongiosum penis.* This substance originates before the prostate gland, surrounds the urethra, and forms the *bulb;* then proceeds to the end of the corpora cavernosa, and terminates in the *glans penis,* which it forms.

Co′rpus varico′sum. The spermatic chord.

Corra′go. (From *cor,* the heart; it being supposed to have a good effect in comforting the heart.) See *Borago.*

Co′rre. (From κειρω, to shave.) The temples. That part of the jaws where the beard grows, and which it is usual to shave.

CORROBORANTS. (*Corroborantia,* sc. *medicamenta.*) Medicines, or whatever gives strength to the body, as bark, wine, beef, cold bath, &c. See *Tonics.*

Corrosive sublimate. See *Hydrargyri oxymurias.*

CORROSIVES. (*Corrosiva,* sc. *medicamenta;* from *corrodo,* to eat away.) See *Escharotics.*

CORRUGA′TOR SUPERCI′LII. (From *corrugo,* to wrinkle.) *Musculus supercilii* of Winslow. *Musculus frontalis verus, seu corrugator coiterii* of Douglas, and *Cutaneo sourcillier* of Dumas. A small muscle situated on the forehead. When one muscle acts, it is drawn towards the other, and projects over the inner canthus of the eye. When both muscles act, they pull down the skin of the forehead, and make it wrinkle, particularly between the eye-brows.

CO′RTEX. (*-ticis,* m. or f.) This term is generally, though improperly, given to the Peruvian bark. It applies to any rind, or bark.

Co′rtex angeli′næ. The bark of a tree growing in Grenada. A decoction of it is recommended as a vermifuge. It excites tormina, similar to jalap, and operates by purging.

Co′rtex angustu′ræ. See *Cuspariæ.*

Co′rtex antiscorbu′ticus. The canella alba.

Co′rtex aroma′ticus. The canella alba.

Co′rtex bela-aye. See *Bela-aye cortex.*

Co′rtex cane′llæ malaba′ricæ. See *Laurus cassia.*

Co′rtex cardina′lis de Lu′go. The Peruvian bark was so called, because the Cardinal Lugo had testimonials of above a thousand cures performed by it in the year 1653.

Co′rtex ce′rebri. The cortical substance of the brain.

Co′rtex chi′næ re′gius. See *Cinchona.*

Co′rtex chi′næ suriname′nsis. This bark is remarkably bitter, and preferable to the other species in intermittent fevers.

Co′rtex chinchi′næ. See *Cinchona.*

Co′rtex eluthe′riæ. See *Croton cascarilla.*

Co′rtex geoffroy′æ jamaice′nsis. See *Geoffroya Jamaicensis.*

Co′rtex la′vola. The bark bearing this name is supposed to be the produce of the tree which affords the *anisum stellatum.* Its virtues are similar.

Co′rtex magella′nicus. See *Wintera aromatica.*

Co′rtex massoy. The produce of New Guinea, where it is beaten into a pultaceous mass with water, and rubbed upon the abdomen to allay tormina of the bowels. It partakes of the smell and flavour of cinnamon.

Co′rtex pa′trum. The Peruvian bark.

Co′rtex Peruvia′nus. See *Cinchona.*

Co′rtex Peruvia′nus fla′vus. See *Cinchona.*

Co′rtex Peruvia′nus ru′ber. See *Cinchona.*

Co′rtex pocgerebæ. This bark is sent from America; and is said to be serviceable in diarrhœas, dysenteries, and hepatic fluxes.

Co′rtex qua′ssiæ. See *Quassia.*

Co′rtex wintera′nus. See *Wintera aromatica.*

CO′RTICAL. Cineritious substance. The external substance of the brain is of a darker colour than the internal, and surrounds the medullary substance, as the bark does the tree; hence it is termed *cortical.* See also *Kidneys.*

Cortu′sa. The plant self-heal; bear's ear; sanicle. It is expectorant.

Co′ru cana′rica. A quince-like tree of Malabar; it is antidysenteric.

CO′RYLUS. (Derivation uncertain; according to some, from καρυα, a walnut.) 1. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Polyandria.*

2. The pharmacopœial name of the hazel-tree. See *Corylus avellana.*

Co′rylus ave′llana. The hazel-nut tree. The nuts of this tree are much eaten in this country; they are hard of digestion, and often pass the bowels very little altered; if, however, they are well chewed, they give out a nutritious oil. An oil is also obtained from the wood of this tree, *Corylus avellana stipulis ovatis, obtusis,* of Linnæus: which is efficacious against the tooth-ache, and is said to kill worms.

Co′ryphe. (Κορυφη.) The vertex of the head. The inner parts of the nails.

CORY′ZA. (*Coryza,* κορυζα: from καρα, the head, and ζεω, to boil.) An increased discharge of mucus from the nose. See *Catarrh.*

Cory′za catarrha′lis. A catarrh from cold.

Cory′za febrico′sa. A catarrh with fever.

Cory′za phlegmatorrha′gia. A catarrh, with much discharge of mucus.

Cory′za purule′nta. A catarrh, with discharge of matter.

Cory′za variolo′sa. A catarrh accompanying small-pox.

Cory′za virule′nta. A catarrh, with discharge of acrid mucus.

Coscu′lia. The grains of kermes.

COSME′TIC. A term applied to remedies against blotches and freckles.

Co′smos. *Rythmus.* A regular series. In Hippocrates it is the order and series of critical days.

Co′ssis. *Cossi.* A worm that breeds in wood: also a little tubercle in the face, like the head of a worm.

Co′ssum. A malignant ulcer of the nose mentioned by Paracelsus.

CO′STA. (*A custodiendo*; because the ribs surround and defend the vital parts.) A rib. The ribs are four-and-twenty in number, twelve on each side of the thorax. See *Ribs.*

Co′sta pulmona′ria. *Costa herba.* A name of the herb hawkweed.

Costo-hyoide′us. (From *costa,* a rib, and *hyoideus,* belonging to the hyoidal bone.) A muscle so named from its origin and insertion. See *Omo-hyoideus.*

CO′STUS. (From *kasta,* Arabian.) The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

Co′stus ama′rus. See *Costus arabicus.*

Co′stus ara′bicus. *Costus indicus, amarus, dulcis, orientalis.* Sweet and bitter costus. The root of this tree, *Costus arabicus* of Linnæus, possesses bitter and aromatic virtues, and is considered as a good stomachic. Formerly there were two other species, the *bitter* and *sweet,* distinguished for use. At present, the Arabic only is known, and that is seldom employed. It is, however, said to be stomachic, diaphoretic, and diuretic.

Co′stus cortico′sus. The canella alba.

Co′stus horto′rum mi′nor. The ageratum.

Co′stus ni′gra. The artichoke.

Co′style. (Κοτυλη, the name of an old measure.) The socket of the hip-bone.

Cotaro′nium. A word coined by Paracelsus, implying a liquor into which all bodies, and even their elements, may be dissolved.

Co′tis. (From κοτλη, the head.) The back part of the head; sometimes the hollow of the neck.

Co′tula fœ′tida. (*Cotula,* dim. of *cos,* a whetstone, from the resemblance of its leaves to a whetstone; or from κοτυλη, a hollow.) Stinking chamomile. See *Anthemis cotula.*

COTYLOID CAVITY. (*Cotyloides;* from κοτυλη, the name of an old measure, and ειδος, resemblance.) The acetabulum. See *Innominatum os.*

Cotyloi′des. See *Cotyloid cavity.*

COUCHING. A surgical operation that consists in removing the opaque lens out of the axis of vision, by means of a needle, constructed for the purpose. There are two couching needles, which now seem to be preferred to all others; the one used by Mr.

Hey, and that employed by Professor Scarpa.

Couch-grass. See *Triticum repens.*

COUGH. *Tussis.* A sonorous concussion of the thorax, produced by the sudden expulsion of the inspired air.

Co′um. The meadow-saffron.

COUNTER-OPENING. *Contra-apertura.* An opening made in any part of an abscess opposite to one already in it. This is often done in order to afford a readier egress to the collected pus.

Coup de soleil. (French.) An erysipelas or apoplexy, or any affection produced instantaneously from a scorching sun.

Cou′rap. (Indian.) A distemper very common in Java, and other parts of the East Indies, where there is a perpetual itching and discharge of matter. It is a herpes on the axilla, groins, breast, and face.

Cou′rbaril. The tree which produces the gum anime. See *Anime.*

Couro′ndi. An evergreen tree of India, said to be antidysenteric.

Couroy moe′lli. A shrub of India, said to be antivenomous.

Cou′scous. An African food, much used about the river Senegal. It is a composition of the flour of millet, with some flesh, and what is there called lalo.

Covola′m. The *Cratæva marmelos* of Linnæus, whose fruit is astringent whilst unripe; but when ripe of a delicious taste. The bark of the tree strengthens the stomach, and relieves hypochrondriac languors.

Cowhage. See *Dolichos.*

Cow-itch. See *Dolichos.*

COWPER, William, was born about the middle of the 17th century, and became distinguished as a surgeon and anatomist in this metropolis. His first work, entitled "Myotomia Reformata," in 1694, far excelled any which preceded it on that subject in correctness, though since surpassed by Albinus. Three years after, he published at Oxford "the Anatomy of Human Bodies," with splendid plates, chiefly from Bidloo; but forty of the figures were from drawings made by himself; he added also some ingenious and useful anatomical and surgical observations. Having been accused of plagiarism by Bidloo, he wrote an apology, called "Eucharistia;" preceded by a description of some glands, near the neck of the bladder, which have been called by his name. He was also author of several communications to the Royal Society, and some observations inserted in the anthropologia of Drake. He died in 1710.

COWPER'S GLANDS. (*Cowperi glandulæ*; named from Cowper, who first described them.) Three large muciparous glands of the male, two of which are situated before the prostate gland under the accelerator muscles of the urine, and the third more forward, before the bulb of the urethra. They excrete a fluid, similar to that of the prostate gland, during the venereal orgasm.

Cowpe′rigla′ndulæ. See *Cowper's glands.*

CO′XA. The ischium is sometimes so called, and sometimes the os coccygis.

Coxe′ndix. (From *coxa*, the hip.) The ischium; the hip-joint.

CRABLOU′SE. A species of pediculus which infests the axillæ and pudenda.

Crab-yaws. A name in Jamaica for a kind of ulcer on the soles of the feet, with callous lips, so hard that it is difficult to cut them.

CRA′MBE. (Κραμϐη, the name given by Dioscorides, Galen, and others, to the cabbage; the derivation is uncertain.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliculosa.* Cabbage.

Cra′mbe mari′tima. The systematic name for the sea-cole.

CRAMP. (From *krempen*, to contract. Germ.) A spasm of a muscle or muscles.

Cranesbill, bloody. See *Geranium sanguineum.*

CRA′NIUM. (Κρανιον, *quasi* καρανιον; from καρα, the head.) The skull or superior part of the head. See *Caput.*

Crante′res. (From κραινω, to perform.) A name given to the sapientiæ dentes and other molares, from their office of masticating the food.

CRA′PULA. (Κραιπυλα.) A surfeit; drunkenness.

CRA′SIS. (From κεραννυμι, to mix.) Mixture. A term applied to the humours of the body, when there is such an admixture of their principles as to constitute a healthy state: hence, in dropsies, scurvy, &c. the crasis, or healthy mixture of the principles of the blood, is said to be destroyed.

Cra′spedon. (Κρασπεδον, the hem of a garment; from κρεμαω, to hang down, and πεδον, the ground.) A relaxation of the uvula, when it hangs down in a thin, long membrane, like the hem of a garment.

CRASSAME′NTUM. (From *crassus*, thick.) See *Blood.*

Cra′ssula. (From *crassus*, thick: so named from the thickness of its leaves.) See *Sedum telephium.*

CRATÆ′GUS. (From κρατος, strength: so called from the strength and hardness of its wood.) The wild service-tree, whose virtues are astringent.

Crati′cula. (From *crates*, a hurdle.) The bars or grate which covers the ash-hole in a chemical furnace.

CRATON, John, called also Crafftheim, was born at Breslaw in 1519. He was intended for the church, but preferring the study of medicine went to graduate at Padua, and then settled at Breslaw. But after a few years he was called to Vienna, and made physician and aulic counsellor to the Emperor Ferdinand I.: which offices also he held under the two succeeding emperors, and died in 1585. His works were numerous: the principal are, "A Commentary on Syphilis;" "A Treatise on Contagious Fever;" another on "Therapeutics;" and seven volumes of Epistles and Consultations.

Cream of tartar. See *Potassæ supertartras.*

CREMA′STER. (From κρεμαω, to suspend.) A muscle of the testicle, by which it is suspended, and drawn up and compressed, in the act of coition. It arises from Poupart's ligament, passes over the spermatic cord, and is lost in the cellular membrane of the scrotum, covering the testicles.

Cre′mnus. (From κρημνος, a precipice, or shelving place.) The lips of an ulcer are so called. Also the labium pudendi.

CRE′MOR. Cream. Any substance floating on the top, and skimmed off.

CRE′PITUS. (From *crepo*, to make a noise.) A puff or little noise: the crackling made by the joints when there is a defect of synovia.

Cre′pitus lu′pi. See *Lycoperdon bovista.*

Cress, water. See *Sisymbrium nasturtium.*

CRE′TA. *Carbonas calcis friabilis.* Chalk. Carbonate of lime. Pure chalk is a neutral compound of carbonic acid and lime. See *Creta præparata.*

Cre′ta præpara′ta. Take of chalk a pound; add a little water, and rub it to a fine powder. Throw this into a large vessel full of water; then shake them, and after a little while pour the still turbid liquor into another vessel, and set it by that the powder may subside; lastly, pouring off the water, dry this powder. Prepared chalk is absorbent, and possesses antacid qualities: it is exhibited in form of electuary, mixture, or bolus, in pyrosis, cardialgia, diarrhœa, acidities of the primæ viæ, rachitis, crusta lactea, &c. and is said by some to be an antidote against white arsenic.

Cretaceous acid. See *Carbonic acid.*

Crete, dittany of. See *Origanum dictamnus.*

CRIBRIFO′RMIS. (From *cribrum*, a sieve, and *forma*, likeness; because it is perforated like a sieve.) See *Ethmoid bone.*

CRI′CO. Names compounded of this word belong to muscles which are attached to the cricoid cartilage.

CRI′CO-ARYTÆNOIDE′US LATERA′LIS. *Crico-lateri arithenoidien* of Dumas. A muscle of the glottis, that opens the *rima* by pulling the ligaments from each other.

CRI′CO-ARYTÆNOIDE′US POSTI′CUS. *Crico creti arithenoidien* of Dumas. A muscle of the glottis, that opens the *rima glottidis* a little, and by pulling back the arytænoid cartilage, stretches the ligament so as to make it tense.

Cri′co-pharynge′us. See *Constrictor pharyngis inferior.*

CRI′CO-THYROIDE′US. *Crico-thyroidien* of Dumas. The last of the second layer of muscles between the os hyoides and trunk, that pulls forwards and depresses the thyroid cartilage, or elevates and draws backwards the cricoid cartilage.

CRICOI′DES. (From κρικος, a ring, and ειδος, resemblance.) A round ring like cartilage of the larynx is called the cricoid. See *Larynx.*

Crimno′des. (From κριμνον, bran.) A term applied to urine, which deposits a sediment like bran.

Crina′tus. (From κρινον, the lily.) A term given to a suffumigation mentioned by P. Ægineta, composed chiefly of the roots of lilies.

Cri′nis. The hair. See *Capillus.*

Crinomy′ron. (From κρινον, a lily, and μυρον, ointment.) An ointment composed chiefly of lilies.

CRINO′DES. (From *crinis*, the hair.) *Comedones.* Collections of a sebaceous fluid in the cutaneous follicles upon the face and breast, which appear like black spots, and when pressed out, look like small worms, or, as they are commonly called, maggots.

Crio′genes. An epithet for certain troches, mentioned by P. Ægineta, and which he commends for cleansing sordid ulcers.

Cripso′rchis. (From κρυπτω, to conceal, and *ορχις*, a testicle.) Having the testicle concealed, or not yet descended into the scrotum.

CRI′SIS. (From κρινω, to judge.) The judgment. The sudden change of symptoms in acute diseases, from which the recovery or death is prognosticated or judged of.

Crispatu′ra. (From *crispo*, to curl.) A spasmodic contraction, or curling of the membranes and fibres.

CRI′STA. (*Quasi cerista*; from κερας, a horn, or *carista*: from καρα, the head, as being on the top of the head.) Any thing which has the appearance of a crest, or the comb upon the head of a cock, as crista clitoridis, the nympha. Also a tubercle about the anus; so called from its form.

CRI′STA GA′LLI. An eminence of the ethmoid bone, so called from its resemblance to a cock's comb. See *Ethmoid bone.*

Cri′thamum. See *Crithmum.*

Crithe′rion. (From κρινω, to judge.) The same as crisis.

Cri′the. (Κριθη.) Barley. A stye or tumour on the eyelid, in the shape and of the size of a barley-corn.

CRI′THMUM. (From κρινω, to secrete;

so named from its supposed virtues in promoting a discharge of the urine and menses.) Samphire or sea-fennel.

Cri′thmum mari′timum. The Linnæan name of the samphire or sea-fennel. *Crithmum.* It is a low perennial plant, and grows about the sea-coast in several parts of the island. It has a spicy aromatic flavour, which induces the common people to use it as a pot-herb. Pickled with vinegar and spice it makes a wholesome and elegant condiment which is in much esteem.

Critho′des. (From *κριθη*, barley, and *ειδος*, resemblance.) Resembling a barley-corn. It is applied to small protuberances.

CRI′TICAL. Determining the event of a disease. Many physicians have been of opinion, that there is something in the nature of fevers which generally determines them to be of a certain duration; and, therefore, that their terminations, whether salutary or fatal, happen at certain periods of the disease, rather than at others. These periods, which were carefully marked by Hippocrates, are called *critical days.* The critical days, or those on which we suppose the termination of continued fevers especially to happen, are the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, and twentieth.

Crocidi′xis. (From *κροκιδιζω*, to gather wool.) A fatal symptom in some diseases, where the patient gathers up the bed-clothes, and seems to pick up substances from them.

Cro′cinum. (From *κροκος*, saffron.) Oil of saffron, or a mixture of oil, myrrh, and saffron.

Croco′des. (From *κροκος*, saffron; so called from the quantity of saffron they contain.) A name of some old troches.

Crocoma′gma. (From *κροκος*, saffron, and *μαγμα*, the thick oil or dregs.) A troch made of oil of saffron and spices.

CRO′CUS. (*Κροκος* of Theophrastus. The story of the young Crocus, turned into this flower, may be seen in the fourth book of Ovid's Metamorphoses. Some derive this name from *κροκη*, or *κροκις*, a thread; whence the stamens of flowers are called *κροκιδες*. Others, again, derive it from *Coriscus,* a city and mountain of Cilicia, and others from *crokin,* Chald.) Saffron.

1. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Monogynia.* Saffron.

2. The pharmacopœial name of the prepared stigmata of the *Crocus sativus, spatha univalvi radicali, corollæ tubo longissimo,* of Linnæus. Saffron has a powerful, penetrating, diffusive smell, and a warm, pungent, bitterish taste. Many virtues were formerly attributed to this medicine, but little confidence is now placed in it. The Edinburgh College directs a tincture, and that of London a syrup of this drug.

3. A term given by the older chemists to several preparations of metallic substances, from their resemblance: thus, *crocus martis, crocus veneris.*

Cro′cus antimo′nii. *Crocus metallorum.* This preparation is a sulphuretted oxide of antimony. It possesses emetic and drastic cathartic powers, producing a violent diaphoresis afterwards.

Cro′cus Germa′nicus. See *Carthamus.*

Cro′cus I′ndicus. See *Curcuma.*

Cro′cus ma′rtis. Green vitriol exposed to fire till red.

Cro′cus metallo′rum. See *Crocus antimonii.*

Cro′cus officina′lis. See *Crocus sativus.*

Cro′cus sarace′nicus. See *Carthamus.*

Cro′cus sati′vus. See *Crocus.*

Cro′cus ve′neris. Copper calcined to a red powder.

Cro′mmyon. (*Παρα το τας κορας μυειν*, because it makes the eyes wink.) An onion.

Crommyoxyre′gma. (From *κρομμυον*, an onion, *οξυς*, acid, and *ρηγνυμι*, to break out.) An acid eructation accompanied with a taste resembling onions.

CROONE, William, was born in London, where he settled as a physician, after studying at Cambridge. In 1659 he was chosen rhetoric professor of Gresham College, and soon after register of the Royal Society, which then assembled there. In 1662 he was created doctor in medicine by mandate of the king, and the same year elected fellow of the Royal Society, and of the College of Physicians. In 1670 he was appointed lecturer on anatomy to the Company of Surgeons. On his death in 1684 he bequeathed them 100*l.*; his books on Medicine to the College of Physicians, as also the profits of a house, for Lectures, to be read annually, on Muscular Motion; and donations to seven of the colleges at Cambridge, to found Mathematical Lectures. He left several papers on philosophical subjects, but his only publication was a small tract "De Ratione Motus Musculorum."

Crota′phica arte′ria. The tendon of the temporal muscle.

Crotaphi′tes. (*Crotaphites,* sc. *musculus;* from *κροταφος*, the temple.) See *Temporalis.*

Crota′phium. (From *κροτεω*, to pulsate; so named from the pulsation which in the temples is eminently discernible.) *Crotaphos. Crotaphus.* A pain in the temples.

Cro′taphos. See *Crotaphium.*

Cro′taphus. See *Crotaphium.*

CROTCHET. A curved instrument with a sharp hook to extract the fœtus.

CRO′TON. (From *κροτεω*, to beat.)

1. An insect called a tick, from the

noise it makes by beating its head against wood.

2. A name of the ricinus or castor-oil-berry, from its likeness to a tick.

3. The name of a genus of plants in the Linnæan system. Class, *Monoecia*. Order, *Monadelphia*.

Cro′ton benzo′e. Gum-Benjamin was formerly so called.

Cro′ton cascari′lla. The systematic name of the plant which affords the Cascarilla bark. *Cascarilla. Chocarilla. Elutheria. Eluteria.* The tree that affords the cascarilla bark, is the *Croton cascarilla* of Linnæus. The bark comes to us in quills, covered upon the outside with a rough, whitish matter, and brownish on the inner side; exhibiting, when broken, a smooth, close, blackish-brown surface. It has a light agreeable smell, and a moderately bitter taste, accompanied with a considerable aromatic warmth. It is a very excellent tonic, adstringent, and stomachic, and is deserving of a more general use than it has hitherto met with.

Cro′ton lacci′ferum. The systematic name of the plant upon which gum-lac is deposited.

Cro′ton ti′glium. The name of the tree which affords the pavana wood, and tiglia seeds.

1. *Lignum pavanæ. Lignum pavanum. Lignum moluccense. Croton; foliis ovatis glabris acuminatis serratis, caule arboreo* of Linnæus. The wood is of a light spongy texture, white within, but covered with a greyish bark; and possesses a pungent, caustic taste, and a disagreeable smell. It is said to be useful as a purgative in hydropical complaints.

2. *Grana tiglia. Grana tilli. Grana tiglii.* The grana tilia are seeds of a dark grey colour, the produce of the *Croton tiglium* of Linnæus, in shape very like the seed of the *ricinus communis*. They abound with an oil which is far more acrid and purgative than castor-oil.

Cro′ton tincto′rium. The systematic name of the lacmus plant. *Bezetta cœrulea.* This plant yields the *Succus heliotropii. Lacmus seu tornæ. Lacca cœrulea. Litmus.* It is the *Croton tinctorium; foliis rhombeis repandis, capsulis pendulis, caule herbaceo*, of Linnæus. It is much used by chemists as a test.

Croto′ne. (From κροτον, the tick.) A fungus on trees produced by an insect like a tick; and by metaphor applied to tumours and small fungous excrescences on the periosteum.

Croup. See *Cynanche.*

Crou′sis. (From κρουω, to beat, or pulsate.) Pulsation.

Crou′smata. (From κρουω, to pulsate.) Rheums or defluxions from the head.

Crowfoot. See *Ranunculus.*

Crowfoot cranesbill. See *Geranium pratense.*

CRUCIAL. Some parts of the body are so called when they cross one another, as the crucial ligaments of the thigh.

Crucia′lis. Cross-like. Mugweed or crosswort.

CRUCIBLE. (*Crucibulum*, from *crucio*, to torment; so named, because, in the language of old chemists, metals are tormented in it, and tortured, to yield up their powers and virtues.) A chemical vessel made mostly of earth to bear the greatest heat. They are of various shapes and composition.

Cru′ditas. (From *crudus*, raw.) It is applied to undigested substances in the stomach, and humours in the body unprepared for concoction.

CRUICKSHANK, William, was born at Edinburgh, in 1746. He was intended for the church, and made great proficiency in classical learning; but, showing a partiality to medicine, he was placed with a surgeon at Glasgow. In 1771, he came to London, and was soon after made librarian to Dr. William Hunter; and, on the secession of Mr. Hewson, became assistant, and then joint lecturer in anatomy, with the Doctor. He contributed largely to enrich the Museum, particularly by his curious injections of the lymphatic vessels. He published, in 1786, a work on this subject, which is highly valued for its correctness. In 1795, he communicated to the Royal Society an Account of the Regeneration of the Nerves; and the same year published a pamphlet on Insensible Perspiration; and in 1797, an Account of Appearances in the Ovaria of Rabbits in different Stages of Pregnancy. He died in 1800.

Cru′nion. (From κρουνος, a torrent.) A medicine mentioned by Aetius, and named from the violence of its operation as a diuretic.

CRU′OR. The red part of the blood. See *Blood.*

CRU′RA. The plural of *crus*, a leg or root; applied to some parts of the body from their resemblance to a leg or root: thus *crura cerebri, crura cerebelli*, the *crura* of the diaphragm, &c. &c.

Cru′ra clito′ridis. See *Clitoris.*

Cru′ra medu′llæ oblonga′tæ. The roots of the medulla oblongata.

CRURÆ′US. (From *crus*, a leg; so named, because it covers almost the whole foreside of the upper part of the leg or thigh.) *Cruralis.* A muscle of the leg, situated on the fore-part of the thigh. It arises, fleshy, from between the two trochanters of the os femoris, but nearer the lesser, firmly adhering to most of the fore part of the os femoris; and is inserted, tendinous, into the upper part of the patella, behind the rectus. Its use is to assist the vasti and rectus muscles in the extension of the leg.

CRURAL. Belonging to the crus, leg, or lower extremity.

CRURAL HERNIA. Femoral hernia.

A tumour under the groin, and in the upper part of the thigh, arising from a protrusion of part of an abdominal viscus under Poupart's ligament. See *Hernia cruralis*.

Crura′lis. See *Cruræus*.

Cru′sta. A shell; a scab; the scum or surface of a fluid.

CRU′STA LA′CTEA. A disease that mostly attacks some part of the face of infants at the breast. It is known by an eruption of broad pustules, full of a glutinous liquor, which form white scabs when they are ruptured. It is cured by mineral alteratives.

Cru′sta villo′sa. The inner coat of the stomach and intestines has been so called.

Cru′stula. (Dim. of *crusta*, a shell.) An ecchymosis, or discoloration of the flesh from a bruise, where the skin is entire, and covers it over like a shell.

Crustumina′tum. (From *Crustuminum*, a town where they grew.)

1. A kind of Catherine pear.

2. A rob or electuary made of this pear and apples boiled up with honey.

Crymo′des. (From *κρυος*, cold.) An epithet for a fever, wherein the external parts are cold.

Crypso′rchis. (From *κρυπτω*, to conceal, and *ορχις*, a testicle.) When the testicles are hid in the belly, or have not descended into the scrotum.

CRY′PTÆ. (From *κρυπτω*, to hide.) The little rounded appearances at the end of the small arteries of the cortical substance of the kidneys, that appear as if formed by the artery being convoluted upon itself.

Cryptopy′ica ischu′ria. A suppression of urine from a retraction of the penis within the body.

Cryso′rchis. (Κρυσορχις.) A retraction or retrocession of one of the testicles, the same as crypsorchis.

Crysta′lli. Eruptions about the size of a lupine, white and transparent, which sometimes break out all over the body. They are also called *Crystallinæ*, and by the Italians Taroli. They are probably the pemphigus of modern writers.

CRYSTALLINE LENS. (*Lens crystallina*—*crystallina*, from its crystal-like appearance.) A lentiform pellucid part of the eye, enclosed in a membranous capsule, called the capsule of the crystalline lens, and situated in a peculiar depression in the anterior part of the vitreous humour. Its use is to transmit and refract the rays of light.

Crystalli′num. (From *κρυϛαλλος*, a crystal: so called from its transparency.) White arsenic.

CRYSTALLIZATION. (From *crystallus*, a crystal.) *Crystallizatio*. A property by which crystallizable bodies tend to assume a regular form, when placed in circumstances favourable to that particular disposition of their particles. Almost all minerals possess this property, but it is most eminent in saline substances. The circumstances which are favourable to the crystallization of salts, and without which it cannot take place, are two: 1. Their particles must be divided and separated by a fluid, in order that the corresponding faces of those particles may meet and unite. 2. In order that this union may take place, the fluid which separates the integrant parts of the salt must be gradually carried off, so that it may no longer divide them.

Crysta′llus. (From *κρυος*, cold, and *ϛελλω*, to contract: *i. e.* contracted by cold into ice.) Crystal. The antients supposed that crystals were water intensely frozen. It also means an eruption over the body of white transparent pustules. See *Crystalli*.

Cte′dones. (From *κληδων*, a rake.) The fibres are so called from their pectinated course.

Cteis. (Κτεις.) A comb or rake. *Ctenes*, in the plural number, implies those teeth which are called incisores, from their likeness to a rake.

Cube′bæ. (From *cubabah*; Arab.) See *Piper Cubeba*.

Cubebs. See *Piper Cubeba*.

CUBITAL ARTERY. *Arteria cubitalis*. *Arteria ulnaris*. A branch of the brachial that proceeds in the fore-arm, and gives off the recurrent and inter-osseals, and forms the palmary arch, from which arise branches going to the fingers, called digitals.

Cubital nerve. *Nervus cubitalis*. *Nervus ulnaris*. It arises from the brachial plexus, and proceeds along the ulna.

Cubita′lis mu′sculus. An extensor muscle of the fingers.

Cubitæ′us exte′rnus. An extensor muscle of the fingers.

Cubitæ′us inte′rnus. A flexor muscle of the fingers.

Cu′biti profu′nda ve′na. A vein of the arm.

CU′BITUS. (From *cubo*, to lie down; because the antients used to lie down on that part at their meals.) The fore-arm, or that part between the elbow and wrist.

CUBOI′DES OS. (From *κυβος*, a cube or die, and *ειδος*, likeness.) A tarsal bone of the foot, so called from its resemblance.

Cuckow flower. See *Cardamine*.

Cucu′balus be′hen. *Behen officinarum*. The spatling poppy:—*Cucubalus behen* of Linnæus, formerly used as a cordial and alexipharmic.

Cuculla′ris. (*Cucullaris*, sc. *musculus*; from *cucullus*, a hood: so named, because it is shaped like a hood.) See *Trapezius*.

Cucu′llus. A hood. An odoriferous cap for the head.

Cucumber. See *Cucumis*.

Cucumber, bitter. See *Cucumis Colocynthis*.

Cucumber, squirting. See *Momordica Elaterium.*

Cucumber, wild. See *Momordica Elaterium.*

CU′CUMIS. (*-mis,* m. also *cucumer, -ris. Quasi curvimeres,* from their curvature.) The cucumber.

1. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Syngenesia.* The cucumber.

2. The pharmacopœial name of the garden cucumber. See *Cucumis sativus.*

Cu′cumis agre′stis. See *Momordica Elaterium.*

Cu′cumis asini′nus. See *Momordica Elaterium.*

Cu′cumis colocy′nthis. The systematic name for the officinal bitter apple. *Colocynthis. Alhandula* of the Arabians. Coloquintida. Bitter apple. Bitter gourd. Bitter cucumber. The fruit which is the medicinal part of the *Cucumis colocynthis; foliis multifidis, pomis globosis glabris,* is imported from Turkey. Its spongy membranous medulla, or pith, is directed for use; it has a nauseous, acrid, and intensely bitter taste; and is a powerful irritating cathartic. In doses of ten or twelve grains, it operates with great vehemence, frequently producing violent gripes, bloody stools, and disordering the whole system. It is recommended in various complaints, as worms, mania, dropsy, epilepsy, &c.; but is seldom resorted to, except where other more mild remedies have been used without success, and then only in the form of the *extractum colocynthidis compositum* and the *pilulæ ex colocynthide cum aloë* of the pharmacopœias.

Cu′cumis me′lo. The systematic name of the melon plant. *Melo.* Musk melon. *Cucumis melo* of Linnæus. This fruit, when ripe, has a delicious refrigerating taste, but must be eaten moderately, with pepper, or some aromatic, as all this class of fruits are obnoxious to the stomach, producing spasms and colic. The seeds possess mucilaginous qualities.

Cu′cumis sati′vus. The systematic name of the cucumber plant. *Cucumis. Cucumis sativus; foliorum angulis rectis; pomis oblongis scabris,* of Linnæus. It is cooling and aperient but very apt to disagree with bilious stomachs. It should always be eaten with pepper and oil. The seeds were formerly used medicinally.

Cu′cumis sylve′stris. See *Momordica elaterium.*

Cu′cupha. A hood. An odoriferous cap for the head composed of aromatic drugs.

CUCU′RBITA. (*A curvitate,* according to Scaliger; the first syllable being doubled, as in *cacula, populus,* &c.)

1. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Syngenesia.* The pumpion.

2. The pharmacopœial name of the common pumpion or gourd.

3. A chemical distilling vessel shaped like a gourd.

Cucu′rbita citru′llus. The systematic name of the water-melon plant. *Citrullus. Angura. Jace brasiliensibus. Tetranguria.* Sicilian citrul, or water-melon. The seeds of this plant, *Cucurbita citrullus; foliis multipartitis,* of Linnæus, were formerly used medicinally, but now only to reproduce the plant. Water-melon is cooling and somewhat nutritious; but so soon begins to ferment, as to prove highly noxious to some stomachs, and bring on spasms, diarrhœas, cholera, colics, &c.

Cucu′rbita lagena′ria. The systematic name of the bottle-gourd plant. See *Cucurbita pepo.*

Cucu′rbita pe′po. The systematic name of the common pumpion. *Cucurbita.* The seeds of this plant, *Cucurbita pepo; foliis lobatis, pomis lævibus,* are used indifferently with those of the *Cucurbita lagenaria; foliis subangulatis, tomentosis, basi subtus biglandulosis; pomis lignosis.* They contain a large proportion of oil, which may be made into emulsions; but is superseded by that of sweet almonds.

Cucurbi′tinus. A species of worm, so called from its resemblance to the seed of the gourd. See *Tænia.*

CUCURBI′TULA. (A diminutive of *cucurbita,* a gourd; so called from its shape.) A cupping-glass.

CUCURBI′TULA CRUE′NTA. A cupping-glass with scarification to procure blood.

CUCURBI′TULA CUM FE′RRO. A cupping-glass with scarification to draw out blood.

CUCURBI′TULA SI′CCA. A cupping-glass without scarification.

Cue′ma. (From κυω, to carry in the womb.) The conception, or rather, as Hippocrates signifies by this word, the complete rudiments of the fœtus.

Culbi′cio. A sort of strangury, or rather heat of urine.

Culila′wan co′rtex. See *Laurus.*

CU′LINARY. (*Culinarius,* from *culina,* a kitchen.) Any thing belonging to the kitchen, as culinary salt, culinary herbs.

CULLEN, William, was born at Lanerk, Scotland, in 1712, of respectable, but not wealthy parents. After the usual school education, he was apprenticed to a surgeon and apothecary at Glasgow, and then made several voyages as surgeon to the West Indies. He afterwards settled in practice at Hamilton, and formed a connection with the celebrated William Hunter; and their business being scanty, they agreed alternately to pass a winter at some university. Cullen went first to Edinburgh, and attended the classes so diligently, that he was soon after able to commence teacher. Hunter came the next winter to London, and engaged as assistant in the dissecting room to Dr. William Douglas, who was so pleased with his assiduity and talent, as to offer him a share in his lectures: but though the partnership with Cullen was thus dissolved, they continued ever after a friendly correspondence. Cullen had the good fortune, while at Hamilton, to assist the Duke of Argyle in some chemical pursuits: and still more of being sent for to the Duke of Hamilton in a sudden alarming illness, which he speedily relieved by his judicious treatment, and gained the entire approbation of Dr. Clarke, who afterwards arrived. About the same time he married the daughter of a neighbouring clergyman, who bore him several children. In 1746 he took the degree of doctor in medicine, and was appointed teacher of chemistry at Glasgow. His talents were peculiarly fitted for this office; his systematic genius, distinct enunciation, lively manner, and extensive knowledge of the subject, rendered his lectures highly interesting. In the mean time his reputation as a physician increased, so that he was consulted in most difficult cases. In 1751 he was chosen professor in medicine to the university; and five years after the chemical chair at Edinburgh was offered him, on the death of Dr. Plummer, which was too advantageous to be refused. He soon became equally popular there, and his class increased, so as to exceed that of any other professor, except the anatomical. This success was owing not only to his assiduity, and his being so well qualified for the office, but also in a great measure to the kindness which he showed to his pupils, and partly to the new Views on the Theory of Medicine, which he occasionally introduced into his lectures. He appears also about this time to have given Clinical Lectures at the Infirmary. On the death of Dr. Alston, Lecturer on the Materia Medica, he was appointed to succeed him: and six years after, jointly with Dr. Gregory, to lecture on the Theory and Practice of Medicine, when he resigned the Chemical Chair to his pupil, Dr. Black. Dr. Gregory having died the following year, he continued the Medical Lectures alone, till within a few months of his death, which happened in February 1790, in his seventy-seventh year; and he is said, even at the last, to have shown no deficiency in his delivery, nor in his memory, being accustomed to lecture from short notes. His Lectures on the Materia Medica being surreptitiously printed, he obtained an injunction against their being issued, until he had corrected them; which was accomplished in 1772: but they were afterwards much improved, and appeared in 1789, in two quarto volumes. Fearing a similar fate to his Lectures on Medicine, he published an outline of them in 1784, in four volumes, octavo, entitled "First Lines of the Practice of Physic." He wrote also the "Institutions of Medicine," in one volume, octavo: and a Letter to Lord Cathcart, on the Recovery of drowned Persons. But his most celebrated work is his Synopsis Nosologiæ Methodicæ, successively improved in different editions; the fourth, published in 1785, in two octavo volumes, contains the Systems of other Nosologists till that period, followed by his own, which certainly, as a practical arrangement of diseases, greatly surpasses them.

CULPEPER, Nicholas, was the son of a clergyman, who put him apprentice to an apothecary; after serving his time, he settled in Spitalfields, London, about the year 1642. In the troubles prevailing at that period he appears to have favoured the Puritans: but his decided warfare was with the College of Physicians, whom he accuses of keeping the people in ignorance, like the Popish clergy. He, therefore, published a translation of their Dispensary with practical remarks; also a Herbal, pointing out among other matters under what planet the plants should be gathered; and a directory to midwives, showing the method of insuring a healthy progeny, &c. These works were for some time popular. He died in 1654.

CU'LTER. (From *colo*, to cultivate.) A knife or shear. The third lobe of the liver is so called from its resemblance.

Cu'lus. (From κουλος.) The anus or fundament.

Cu'mamus. See *Piper cubeba*.

Cumin seeds. See *Cuminum*.

CU'MINUM. (From κυω, to bring forth; because it was said to cure sterility.) *Cyminum. Fœniculum orientale*.

1. The name of a genus of plants in the Linnæan system. Class, *Heptandria*. Order, *Digynia*. The cumin plant.

2. The pharmacopœial name of the *Cuminum cyminum* of Linnæus.

Cu'minum æthio'picum. A name for the ammi verum.

Cu'minum cy'minum. The systematic name of the cumin plant. *Cuminum*. A native of Egypt and Ethiopia, but cultivated in Sicily and Malta, from whence it is brought to us. The seeds of cumin, which are the only part of the plant in use, have a bitterish taste, accompanied with an aromatic flavour, but not agreeable. They are generally preferred to other seeds for external use in discussing indolent tumours, as the encysted scrophulous, &c. and give name both to a plaster and cataplasm in the pharmacopœias.

Cunea'lis sutu'ra. The suture by which the os sphenoides is joined to the os frontis.

CU'NEIFORM. (*Cuneiformis*; from *cuneus*, a wedge, and *forma*, likeness.) Some parts of the body are so called, being shaped, or fixed in, like a wedge: such are the sphenoid bone, and some bones of the wrist and tarsus.

Cune′olus. (From *cuneo*, to wedge.) A crooked tent to put into a fistula.

CUPEL. (*Kuppel*, German.) *Copella. Catellus cinereus. Cineritium. Patella docimastica. Testa probatrix, exploratrix*, or *docimastica.* A chemical instrument, which suffers the baser metals to pass through it, when exposed to heat, and retains the pure metal. This process is termed cupellation.

CUPELLA′TION. (From *kuppel*, German.) The purifying of perfect metals by means of an addition of lead, which at a due heat becomes vitrified, and promotes the vitrification and calcination of such imperfect metals as may be in the mixture, so that these last are carried off in the fusible glass that is formed, and the perfect metals are left nearly pure. The name of this operation is taken from the vessels made use of, which are called cupels.

Cu′phos. (Κουφος.) Light, when applied to aliments, it imports their being easily digested; when to distempers, that they are mild.

CUPRE′SSUS. (So called, *απο του κυειν παρισους τους ακρεμονας*, because it produces equal branches.) Cypress.

1. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Monadelphia.* The cypress-tree.

2. The pharmacopœial name of the *Cupressus sempervirens* of Linnæus.

Cupre′ssus sempe′rvirens. The systematic name of the cupressus of the shops. *Cupressus foliis imbricatis squamis quadrangulis*, of Linnæus; called also *cyparissus.* Every part of the plant abounds with a bitter, aromatic, terebinthinate fluid; and is said to be a remedy against intermittents. Its wood is extremely durable, and constitutes the cases of Egyptian mummies.

Cu′pri ammonia′ti li′quor. Solution of ammoniated copper. *Aqua cupri ammoniati* of Pharm. Lond. 1787, and formerly called *aqua sapphirina.* "Take of ammoniated copper, a drachm; distilled water, a pint." Dissolve the ammoniated copper in the water, and filter the solution through paper. This preparation is employed by surgeons for cleansing foul ulcers, and disposing them to heal.

Cu′pri rubi′go. Verdigris.

CU′PRI SU′LPHAS. *Vitriolum cupri. Vitriolum cæruleum. Vitriolum Romanum. Cuprum vitriolatum.* The sulphate of copper possesses acrid and styptic qualities; is esteemed as a tonic, emetic, adstringent, and escharotic, and is exhibited internally in the cure of dropsies, hæmorrhages, and as a speedy emetic. Externally it is applied to stop hæmorrhages, to hæmorrhoids, leucorrhœa, phagedænic ulcers, proud flesh, and condylomata.

CU′PRUM. (*Quasi æs Cyprium:* so called from the island of Cyprus, whence it was formerly brought.) See *Copper.*

Cu′prum ammoniaca′le. See *Cuprum ammoniatum.*

CU′PRUM AMMONIA′TUM. *Cuprum ammoniacale.* Ammoniated copper. Ammoniacal sulphate of copper. Take of sulphate of copper, half an ounce; subcarbonate of ammonia, six drachms; rub them together in a glass mortar; till the effervescence ceases; then dry the ammoniated copper, wrapped up in bibulous paper, by a gentle heat. In this process the carbonic acid is expelled from the ammonia, which forms a triple compound with the sulphuric acid and oxide of copper. This preparation is much milder than the sulphate of copper. It is found to produce tonic and astringent effects on the human body. Its principal internal use has been in epilepsy, and other obstinate spasmodic diseases, given in doses of half a grain, gradually increased to five grains or more, two or three times a day. For its external application, see *Cupri ammoniati liquor.*

Cu′prum vitriola′tum. See *Cupri Sulphas.*

Cu′ra avena′cea. A decoction of oats and succory roots, in which a little nitre and sugar were dissolved, was formerly used in fevers, and was thus named.

Cu′rcas. The Barbadoes nut; a drastic purge.

Cu′rculio. (From *karkarah.* Heb.) The throat; the aspera arteria.

Cu′rcum. The large celandine; deobstruent.

CURCU′MA. (From the Arabic *curcum*, or *herçum.*) Turmeric.

1. The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

2. The pharmacopœial name of the turmeric-tree. See *Curcúma longa.*

Curcu′ma lo′nga. The turmeric plant. *Curcuma; foliis lanceolatis; nervis lateralibus numerossimis* of Linnæus. *Crocus Indicus. Terra marita. Cannacorus radice croceo. Curcuma rotunda. Mayella. Kua kaha* of the Indians. The Arabians call every root of a saffron colour by the name of *curcum.* The root of this plant is imported here in its dried state from the East Indies, in various forms. Externally it is of a pale yellow colour, wrinkled, solid, ponderous, and the inner substance of a deep saffron or gold colour: its odour is somewhat fragrant; to the tasté it is bitterish, slightly acrid, exciting a moderate degree of warmth in the mouth, and on being chewed it tinges the saliva yellow. It is an ingredient in the composition of *Curry powder*, is valuable as a dyeing drug, and furnishes a chemical test of the presence of uncombined alkalies. It is now very seldom used medicinally, but retains a place in our pharmacopœias.

Curcu'ma ro'tunda. See *Curcuma longa.*

CU'RMI. (From κεραω, to mix.) Ale. A drink made of barley, according to Dioscorides.

Currants. See *Ribes.*

Cu'rsuma. *Curtuma.* The *Ranunculus ficaria* of Linnæus.

Curva'tor co'ccygis. A muscle bending the coccyx.

Cursu'ta. (Corrupted from *cassuta*, *kasuth*, Arab.) The root of the *Gentiana purpurea* of Linnæus.

CUSCU'TA. (According to Linnæus, a corruption from the Greek Κασυτας, or Καδυτας, which is from the Arabic *Chessuth*, or *Chasuth.*) Dodder.

1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Digynia.*

2. The pharmacopœial name of dodder of thyme. See *Cuscuta Epithymum.*

Cuscu'ta epithy'mum. The systematic name of dodder of thyme. *Epithymum. Cuscuta.* Dodder of thyme. A parasitical plant, possessing a strong disagreeable smell, and a pungent taste, very durable in the mouth. Two kinds are recommended in melancholia, as cathartics, viz. *Cuscuta epithymum; foliis sessilibus, quinquifidis, bracteis obvallatis,* and *cuscuta europæa; floribus sessilibus* of Linnæus.

Cuscu'ta Europæ'a. The systematic name of a species of dodder of thyme. See *Cuscuta Epithymum.*

CUSPIDA'TUS. (From *cuspis*, a point.) See *Teeth.*

CUSPA'RIA. The generic name given by Messrs. Humboldt and Bonpland to the tree from which we obtain the Angustura bark.

Cuspa'ria febri'fuga. This is the tree said to yield the bark called angustura. *Cortex cuspariæ.* A bark imported from Angustura in South America. Its external appearances vary considerably. The best is not fibrous, but hard, compact, and of a yellowish-brown colour, and externally of a whitish hue. When reduced into powder, it resembles that of Indian rhubarb. It is very generally employed as a febrifuge, tonic, and adstringent. While some deny its virtue in curing intermittents, by many it is preferred to the Peruvian bark; and it has been found useful in diarrhœa, dyspepsia, and scrofula. It was thought to be the bark of the *Brucea antidysenterica*, or *ferruginea.* Willdenow suspected it to be the *Magnalia plumieri;* but Humboldt and Bonpland, the celebrated travellers in South America, have ascertained it to belong to a tree not before known, and which they promise to describe by the name of *Cusparia febrifuga.*

Cu'spis. (From *cuspa*, Chald. a shell, or bone, with which spears were formerly pointed.) The glans penis was so called, from its likeness to the point of a spear. Also a bandage.

Cu'stos o'culi. An instrument to fix the eye during an operation.

Cuta'mbuli. (From *cutis*, the skin, and *ambulo*, to walk.) Cutaneous worms; scorbutic itching.

Cuta'neus mu'sculus. The platysma myoides.

CUTANEOUS. (From *cutis*, the skin.) Belonging to the skin.

CUTICLE. (*Cuticula*, dim. of *cutis*, the skin.) *Epidermis.* Scarf-skin. A thin, pellucid, insensible membrane, of a white colour, that covers and defends the true skin, with which it is connected by the hairs, exhaling and inhaling vessels, and the rete mucosum.

CU'TIS. (*-tis*, fœm.) *Derma.* The true skin. A thick, fibrous, vascular, and nervous membrane, that covers the whole external surface of the body, and is the seat of the organ of touch, as also of exhalation, and inhalation.

CU'TIS ANSERI'NA. (*Anserina;* from *anser*, a goose.) The rough state the skin is sometimes thrown into from the action of cold, or other cause, in which it looks like the skin of the goose.

CU'TIS VE'RA. The true skin under the cuticle.

Cy'anus. (Κυανος, cærulean, or sky-blue; so called from its colour.) Blue-bottle. See *Centaurea.*

Cy'ar. (From κεω, to pour out.) The lip of a vessel. The eye of a needle; and the orifice of the internal ear, from its likeness to the eye of a needle.

Cya'sma. Spots on the skin of pregnant women.

Cyathi'scus. (From κυαθος, a cup.) The hollow part of a probe, formed in the shape of a small spoon, as an ear-picker.

Cy'bitos. See *Cubitus.*

Cy'bitum. See *Cubitus.*

Cy'bitus. See *Cubitus.*

Cyboi'des. See *Cuboides.*

Cy'ceum. (From κυκαω, to mix.) *Cyceon.* A mixture of the consistence of pap.

Cy'cima. (From κυκαω, to mix.) So called from the mixture of the ore with lead, by which litharge is made.

CY'CLAMEN. (From κυκλος, circular; either on account of the round form of the leaves, or of the roots.) Cyclamen.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the sow-bread.

Cy'clamen Europæ'um. The systematic name of the *Arthanita*, or sow-bread.

Cycli'scus. (From κυκλος, a circle.) An

instrument in the form of a half moon, formerly used for scraping rotten bones.

Cycli′smus. (From κυκλος, a circle.) A lozenge.

Cyclopho′ria. (From κυκλος, a circle, and φερω, to bear.) The circulation of the blood, or other fluids.

Cyclo′pion. (From κυκλοω, to surround, and ωψ, the eye.) The white of the eye.

Cy′clos. A circle. Hippocrates uses this word to signify the cheeks, and the orbits of the eyes.

Cy′clus metasyncri′ticus. It is a long protracted course of remedies, persisted in with a view of restoring the particles of the body to such a state as is necessary to health.

CYDO′NIUM MA′LUM. (From *Cydon*, a town in Crete, where they grew.) The quince. See *Pyrus Cydonia.*

Cye′ma. (From κυω, to bring forth.) Parturition.

Cyli′chnis. (From κυλιξ, a cup.) A gallipot or vessel of any kind to hold medicines in.

Cyllo′sis. (From κυλλοω, to make lame.) A tibia or leg bending outwards.

Cyli′ndrus. (From κυλιω, to roll round.) A cylinder. A tent for a wound, equal at the top and bottom.

Cy′lus. (From κυλλοω, to make lame.) In Hippocrates, it is one affected with a kind of luxation, which bends outwards, and is hollowed inward. Such a defect in the tibia is called *Cyllosis*, and the person to whom it belongs, is called by the Latins *Varus*, which term is opposed to *Valgus.*

Cymato′des. Is applied by Galen and some others to an unequal fluctuating pulse.

Cy′mba. (From κυμβος, hollow.) A boat, or pinnace. A bone of the wrist is so called, from its supposed likeness to a skiff.

Cymina′lis. Gentian.

Cy′minum. See *Cuminum.*

CYNA′NCHE. (From κυων, a dog, and αγχω, to suffocate, or strangle; so called from dogs being said to be subject to it.) Sore throat. A genus of disease in the class *pyrexiæ*, and order *phlegmasiæ* of Cullen. It is known by pain and redness of the throat, attended with a difficulty of swallowing and breathing. The species of this disease are:—

1. *Cynanche trachealis;* called also by some *cynanche laryngea. Suffocatio stridula angina perniciosa. Asthma infantum. Cynanche stridula. Morbus strangulatorius. Catarrhus suffocatious Barbadensis. Angina polyposa sive membranacea.* The croup. A disease that mostly attacks infants, who are suddenly seized with a difficulty of breathing and a crouping noise: it is an inflammation of the mucous membrane of the trachea that induces the secretion of a very tenacious coagulable lymph, which lines the trachea and bronchia, and impedes respiration. The croup does not appear to be contagious, whatever some physicians may think to the contrary; but it sometimes prevails epidemically. It seems, however, peculiar to some families; and a child having once been attacked, is very liable to its returns. It is likewise peculiar to young children, and has never been known to attack a person arrived at the age of puberty.

The application of cold seems to be the general cause which produces this disorder, and therefore it occurs more frequently in the winter and spring, than in the other seasons. It has been said, that it is most prevalent near the sea-coast; but it is frequently met with in inland situations, and particularly those which are marshy.

Some days previous to an attack of the disease, the child appears drowsy, inactive, and fretful; the eyes are somewhat suffused and heavy; and there is a cough, which, from the first, has a peculiar shrill sound; this, in the course of two days, becomes more violent and troublesome, and likewise more shrill. Every fit of coughing agitates the patient very much; the face is flushed and swelled, the eyes are protuberant, a general tremor takes place, and there is a kind of convulsive endeavour to renew respiration at the close of each fit. As the disease advances, a constant difficulty of breathing prevails, accompanied sometimes with a swelling and inflammation in the tonsils, uvula, and velum pendulum palati; and the head is thrown back, in the agony of attempting to escape suffocation. There is not only an unusual sound produced by the cough, (something between the yelping and barking of a dog,) but respiration is performed with a hissing noise, as if the trachea was closed up by some slight spongy substance. The cough is generally dry; but if any thing is spit up, it has either a purulent appearance, or seems to consist of films resembling portions of a membrane. Where great nausea and frequent retchings prevail, coagulated matter of the same nature is brought up. With these symptoms, there is much thirst, and uneasy sense of heat over the whole body, a continual inclination to change from place to place, great restlessness, and frequency of the pulse.

In an advanced stage of the disease, respiration becomes more stridulous, and is performed with still greater difficulty, being repeated at longer periods, and with greater exertions, until at last it ceases entirely.

The croup generally proves fatal by suffocation, induced either by spasm affecting the glottis, or by a quantity of matter blocking up the trachea or bronchia; but when it terminates in health, it is by a resolution of the inflammation, by a ceasing of the spasms, and by a free expectoration of the matter exuding from the trachea, or of the crusts formed there.

The disease has, in a few instances, terminated fatally within twenty-four hours after its attack: but it more usually happens, that where it proves fatal, it runs on to the fourth or fifth day. Where considerable portions of the membranous films, formed on the surface of the trachea, are thrown up, life is sometimes protracted for a day or two longer than would otherwise have happened.

Dissections of children who have died of the croup, have always shown a preternatural membrane, lining the whole internal surface of the upper part of the trachea, which may always be easily separated from the proper membrane. There is likewise usually found a good deal of mucus, with a mixture of pus, in the trachea and its ramifications.

The treatment of this disease must be conducted on the strictly antiphlogistic plan. It will commonly be proper, where the patient is not very young, to begin by taking blood from the arm, or the jugular vein; several leeches should be applied along the fore part of the neck: it will then be right to give a nauseating emetic, ipecacuanha with tartarized antimony, or with squill in divided doses; this may be followed up by cathartics, diaphoretics, digitalis, &c.: large blisters ought to be applied near the affected part, and a discharge kept up by savine cerate, or other stimulant dressing. Mercury, carried speedily to salivation, has in several instances arrested the progress of the disease, when it appeared proceeding to a fatal termination. As the inflammation is declining, it is very important that free expectoration should take place; this may be promoted by nauseating medicines, by inhaling steam, and by stimulating gargles; for which the decoction of seneka is particularly recommended. Where there is much wheezing, an occasional emetic may relieve the patient considerably: and under symptoms of threatening suffocation, the operation of bronchotomy has sometimes saved life. Should fits of spasmodic difficulty of breathing occur in the latter periods of the disease, opium joined with diaphoretics would be most likely to do good.

2. *Cynanche tonsillaris.* The inflammatory quincy, called also *angina inflammatoria.* In this complaint, the inflammation principally occupies the tonsils; but often extends through the whole mucous membrane of the fauces, so as essentially to interrupt the speech, respiration, and deglutition of the patient.

The causes which usually give rise to it are, exposure to cold, either from sudden vicissitudes of weather, from being placed in a partial current of air, wearing damp linen, sitting in wet rooms, or getting wet in the feet; all of which may give a sudden check to perspiration. It principally attacks those of a full and plethoric habit, and is chiefly confined to cold climates, occurring usually in the spring and autumn; whereas the ulcerated sore throat chiefly attacks those of a weak irritable habit, and is most prevalent in warm climates. The former differs from the latter likewise in not being contagious. In many people there seems to be a particular tendency to this disease; as from every considerable application of cold it is readily induced.

An inflammatory sore throat discovers itself by a difficulty of swallowing and breathing, accompanied by a redness and tumour in one or both tonsils, dryness of the throat, foulness of the tongue, lancinating pains in the parts affected, a frequent but difficult excretion of mucus, and some small degree of fever. As the disease advances, the difficulty of swallowing and breathing becomes greater, the speech is very indistinct, the dryness of the throat and thirst increase, the tongue swells and is incrusted with a dark fur, and the pulse is full and frequent. In some cases, a few white, sloughly spots are to be observed on the tonsils. If the inflammation proceeds to such a height as to put a total stop to respiration, the face will become livid, the pulse will sink, and the patient will quickly be destroyed.

The chief danger arising from this species of quincy is, the inflammation occupying both tonsils, and proceeding to such a degree as to prevent a sufficient quantity of nourishment for the support of nature from being taken, or to occasion suffocation; but this seldom happens, and its usual termination is either in resolution or suppuration. When proper steps are adopted, it will in general readily go off by the former.

Where the disease has proved fatal by suffocation, little more than a highly inflamed state of the parts affected, with some morbid phenomena in the head, have been observed on dissection.

This is usually a complaint not requiring very active treatment. If, however, the inflammation run high, in a tolerably strong and plethoric adult, a moderate quantity of blood should be drawn from the arm, or the jugular vein: but still more frequently leeches will be required; or scarifying the tonsils may afford more effectual relief. An emetic will often be very beneficial, sometimes apparently check the progress of the complaint: likewise cathartics must be employed, diaphoretics, and the general antiphlogistic regimen. A blister to the throat, or behind the neck, sometimes has a very excellent effect: but in milder cases, the linimentum ammoniæ, or other rubefacient application, applied every six or eight hours, and wearing flannel round the throat, may produce a sufficient determination from the part affected. The use of proper gargles generally contributes materially to the cure: if there be much tension and pain in the fauces, a solution of nitrate of potash will be best; otherwise dilute acids, a weak solution of alum, &c. Should the disease proceed to suppuration, warm emollient gargles ought to be employed, and perhaps similar external applications may be of some service: but it is particularly important to make an early opening into the abscess for the discharge of the pus. When deglutition is prevented by the tumefaction of the tonsils, it is recommended to exhibit nutritious clysters; and when suffocation is threatened, an emetic, or inhaling ether, may cause a rupture of the abscess, or this may be opened; but if relief be not thereby obtained bronchotomy will become necessary.

3. *Cynanche pharyngea.* This species is so called when the pharynx is chiefly affected. Dr. Wilson, in his Treatise on Febrile Diseases, includes in his definition of cynanche tonsillaris, that of cynanche pharyngea. These varieties of cynanche differ considerably when they are exquisitely formed. But the one is seldom present in any considerable degree without being attended with more or less of the other. Dr. Cullen declares, indeed, that he never saw a case of true cynanche pharyngea; that is, a case in which the inflammation was confined to the pharynx; it constantly spread in a greater or less degree to the tonsils and neighbouring parts. Besides the mode of treatment is, in almost every instance, the same in both cases. And if we admit the cynanche pharyngea to be a distinct variety, we must admit another, the cynanche œsophagea; for inflammation frequently attacks the œsophagus, and is sometimes even confined to it.

4. *Cynanche parotidea.* The mumps. A swelling on the cheek and under the jaw, extending over the neck, from inflammation of the parotid and other salivary glands, rendering deglutition, or even respiration, sometimes difficult, declining the fourth day. Epidemic and contagious.

The disease is subject to a metastasis occasionally, in females to the mammæ, in males to the testes; and in a few instances repelled from these parts it has affected the brain and even proved fatal. In general, however, the disease is without danger, and scarcely calls for medical aid. Keeping a flannel over the part, and the antiphlogistic regimen, with mild laxatives, will be sufficient. Should the mammæ, or the testes, be affected, more active evacuations may be necessary to prevent the destruction of those organs, bleeding general and topical, &c. but avoiding cold applications, lest it should be driven to the brain. And where this part is unfortunately attacked, besides the means explained under *Phrenitis,* it may be useful to endeavour to recall the inflammation to its former seat by warm fomentations, stimulant liniments, &c.

5. *Cynanche maligna.* The malignant, putrid, or ulcerous sore throat. Called also *cynanche gangrænosa. Angina ulcerosa. Febris epidemica cum angina ulcusculosa. Angina epidemica. Angina gangrænosa. Angina suffocativa. Angina maligna.* This disease is readily to be distinguished from the inflammatory quincy, by the soreness and specks which appear in the fauces, together with the great debility of the system, and small fluttering pulse, which are not to be observed in the former. In the inflammatory sore throat there is always great difficulty of swallowing, a considerable degree of tumour, with a tendency in the parts affected to suppurate, and a hard, full pulse. Moreover in the former affection the disease is seated principally in the mucous membrane of the mouth and throat; whereas in the latter the inflammation chiefly occupies the glandular parts.

The putrid sore throat often arises from a peculiar state of the atmosphere, and so becomes epidemical; making its attacks chiefly on children, and those of a weak relaxed habit. It is produced likewise by contagion, as it is found to run through a whole family, when it has once seized any person in it; and it proves often fatal, particularly to those in an infantile state.

It appears, however, that under this head two different complaints have been included; the one, especially fatal to children, is an aggravated form of scarlatina; the other, a combination of inflammation of the fauces with typhus fever: the former is perhaps always, the latter certainly often, contagious. See *Scarlatina* and *Typhus.*

CYNA'NCHE A DEGLUTI'TIS. Quincy from hard substances swallowed.

CYNA'NCHE A DYSENTE'RIA. Quincy from dysentery.

CYNA'NCHE ANGINO'SA. The inflammatory quincy.

CYNA'NCHE ARTHRI'TICA. Quincy from gout.

CYNA'NCHE EPIDE'MICA. The cynanche maligna.

CYNA'NCHE GANGRÆNO'SA. The cynanche maligna.

CYNA'NCHE HEPA'TICA. Quincy from a disease of the liver.

CYNA'NCHE LARYNGE'A. The cynanche trachealis.

CYNA'NCHE MALI'GNA. See *Cynanche.*

CYNA'NCHE PAROTIDE'A. See *Cynanche.*

CYNA'NCHE PHARYNGE'A. See *Cynanche.*

CYNA'NCHE PRUNE'LLA. Common sore throat.

CYNA'NCHE PURPURO-PAROTIDE'A. A cynanche maligna, or malignant sore throat.

CYNA'NCHE STRI'DULA. The croup. See *Cynanche.*

CYNA'NCHE THY'MICA. Sore throat from an enlargement of the thyroid gland.

CYNA'NCHE TONSILLA'RIS. See *Cynanche.*

CYNA'NCHE TRACHEA'LIS. See *Cynanche.*

Cyna'nche ulcero'sa. The malignant sore throat.

Cyna'nchica. (From κυναγχη, the quincy.) Medicines which relieve a quincy.

Cynanthro'pia. (From κυων, a dog, and ανθρωπος, a man.) It is used by Bellini, De Morbis Capitis, to express a particular kind of melancholy, when men fancy themselves changed into dogs, and imitate their actions.

Cy'nara sco'lymus. See *Cinara.*

Cy'nchnis. (Κυγχνις.) A vessel of any kind to hold medicines in.

Cynocra'mbe. (From κυων, a dog, and κραμϐη, cabbage; a herb of the cabbage tribe, with which dogs are said to physic themselves.) See *Mercurialis perennis.*

Cyno'ctanum. (From κυων, a dog, and κτεινω, to kill.) A species of aconitum, said to destroy dogs if they eat it.

Cynocy'tisis. (From κυων, a dog, and κυτισος, the cytisus; so named because it was said to cure the distemper of dogs.) The dog-rose. See *Rosa canina.*

Cynode'ctos. (From κυων, a dog, and δακνω, to bite.) So Dioscorides calls a person bit by a mad dog.

Cynode'smion. (From κυων, a dog, and δεω, to bind; so named because in dogs it is very discernible and strong.) A ligature by which the prepuce is bound upon the glans. Sometimes it signifies the lower part of the prepuce.

Cynodo'ntes. (Κυνοδοντες: from κυων, a dog, and οδους, a tooth.) The canine teeth.

CYNOGLO'SSUM. (From κυων, a dog, and γλωσσα, a tongue; so named from its supposed resemblance.) Hound's tongue.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the cynoglossum officinale.

Cynoglo'ssum officina'le. The systematic name for hound's tongue. *Cynoglossum. Lingua canina. Cynoglossum staminibus corolla brevioribus; foliis lato lanceolatis, tomentosis, sessilibus,* of Linnæus. It possesses narcotic powers, but is seldom employed medicinally. Acids are said to counteract the ill effects from an overdose more speedily than any thing else, after clearing the stomach.

Cyno'lophus. (From κυων, a dog, and λοφος, a protuberance; so called because in dogs they are peculiarly eminent.) The asperities and prominences of the vertebræ.

Cynoly'ssa. (From κυων, a dog, and λυσση, madness.) Canine madness.

CYNOMO'RIUM. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Monandria.*

Cynomo'rium cocci'neum. The systematic name of the *fungus melitensis. Fungus melitensis.* This is improperly called a fungus, it being the *Cynomorium coccineum* of Linnæus, a small plant which grows only on a little rock adjoining Malta. A drachm of the powder is given for a dose in dysenteries and hæmorrhages, and with remarkable success.

Cynore'xia. (From κυων, a dog, and ορεξις, appetite.) A voracious or canine appetite. See *Bulimia.*

Cyno'sbatos. See *Cynosbatus.*

CYNO'SBATUS. (From κυων, a dog, and βατος, a thorn; so called because dogs are said to be attracted by its smell.) The dog-rose. See *Rosa canina.*

Cynospa'stum. (From κυων, a dog, and σπαω, to attract.) See *Rosa canina.*

Cyopho'ria. (From κυος, a fœtus, and φερω, to bear.) *Gestation.* The pregnancy of a woman.

Cypari'ssus. See *Cupressus.*

CY'PERUS. (From κυπαρος, a little round vessel, which its roots are said to resemble.) Cyperus. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Monogynia.*

Cy'perus lo'ngus. The pharmacopœial name of the English galangale. *Cyperus longus; culmo triquetro folioso, umbella foliosa supra-decomposita; pedunculis nudis, spicis alternis,* of Linnæus. The smell of the root of this plant is aromatic, and its taste warm, and sometimes bitter. It is now totally fallen into disuse.

Cy'perus rotu'ndus. This species, the round cyperus, *Cyperus rotundus; culmo triquetro subnudo, umbella decomposita; spicis alternis linearibus,* of Linnæus, is generally preferred to the former, being a more gratefully aromatic bitter. It is chiefly used as a stomachic.

Cypho'ma. (From κυπτω, to bend.) A gibbosity, or curvature of the spine.

Cypho'sis. An incurvation of the spine.

Cypress spurge. See *Esula minor.*

Cy'prinum o'leum. Flowers of cypress, calamus, cardamoms, &c. boiled in olive oil.

Cy'prium. (From Κυπρος, Cyprus, an island where it is said formerly to have abounded.) Copper.

CYPRUS. The cypress-tree, or Eastern privet; so called from the island of Cyprus, where it grew abundantly.

Cy'pselis. (From κυψελη, a bee-hive.) The aperture of the ear; the ear-wax.

Cyrcne'sis. (From κυρκναω, to mix.) A mixture, or composition.

Cyrto'ma. (From κυρτος, curved.) An unnatural convex tumour; tympanites.

Cyrtono'sus. (From κυρτος, curved, and νοσος, a disease.) The rickets, or curved spine.

Cy'ssarus. (From κυσος, the anus.) The intestinum rectum is so called, because it reaches to the anus.

Cysso'tis. (From κυσος, the anus.) An inflammation of the anus.

Cysteoli'thus. (From κυστις, the bladder, and λιθος, a stone.) The stone in the bladder.

Cy'sthus. (Κυσθος.) The anus.

CYSTIC. Belonging to the urinary or gall bladder.

Cystic duct. *Ductus cysticus.* The membranous canal that conveys the bile from the hepatic duct into the gall-bladder.

Cy'stica. (From κυστις, the bladder.) Remedies for diseases of the bladder.

Cy'stides. (From κυστις, a bag.) Encysted tumours.

Cystiphlo'gia. (From κυστις, the bladder, and φλεγω, to burn.) An inflammation in the bladder.

Cystirrha'gia. (From κυστις, the bladder, and ρηγνυμι, to burst forth.) A discharge of blood from the bladder.

CY'STIS. (Κυστις, a bag.) The bladder; any receptacle of morbid humours. See *Urinary bladder.*

CY'STIS CHOLE'DOCHA. See *Gall-bladder.*

CY'STIS FE'LLEA. See *Gall-bladder.*

CYSTI'TIS. (From κυστις, the bladder.) Inflammation of the bladder. A genus of disease arranged by Cullen in the class *pyrexiæ*, and order *phlegmasiæ.* It is known by great pain in the region of the bladder, attended with fever and hard pulse, a frequent and painful discharge of urine, or a suppression, and generally tenesmus. This is rarely a primary disease, and when it occurs, the above character of it will readily point it out. There is frequently also nausea and vomiting, and, in some cases, delirium. It most generally arises in consequence of inflammation of the adjacent parts, or from calculi in the bladder. The treatment is very similar to that of *Nephritis;* which see. When suppression of urine attends, the catheter must be occasionally introduced.

CYSTOCE'LE. (From κυστις, the bladder, and κηλη, a tumour.) An hernia formed by the protusion of the urinary bladder

Cystoli'thicus. (From κυστις, the bladder, and λιθος, a stone.) A suppression of urine from a stone in the bladder, is called ischuria cystolithica.

Cystophle'gicus. (From κυστις, the bladder, and φλεγω, to burn.) A suppression of urine from an inflammation of the bladder, was formerly called ischuria cystophlegica.

Cystophlegma'tica. (From κυστις, the bladder, and φλεγμα, phlegm.) A suppression of urine, from too much matter or mucus in the bladder, was called ischuria cystophlegmatica.

Cystopro'ctica. (From κυστις, the bladder, and ϖρωκτος, the anus, or rectum.) A suppression of urine, caused by wind, inflammation of the rectum, hardened fæces, &c. is called ischuria cystoproctica.

Cystopto'sis. (From κυστις, the bladder, and ϖιπτω, to fall.) A protrusion of the inner membrane of the bladder, through the urethra.

Cystospa'sticus. (From κυστις, the bladder, and σπασμα, a spasm.) A suppression of urine, from a spasm in the sphincter of the bladder, was called ischuria cystospastica.

Cystospy'icus. (From κυστις, the bladder, and ϖυον, pus.) A suppression of urine, from purulent matter in the bladder, was called ischuria cystospyica.

Cystothromboi'des. (From κυστις, the bladder, and θρομβος, a coagulation of blood.) A suppression of urine, from a concretion of grumous blood in the bladder, was called ischuria cystothromboides.

CYSTOTO'MIA. (From κυστις, the bladder, and τεμνω, to cut.) The operation of cutting or piercing the bladder.

Cy'thion. An eye-wash.

Cy'tinus. (From κυω, to produce; so called from its fecundity.) The bud or flower of the pomegranate.

Cy'tinus hypoci'stis. The plant on whose fruit the *succus hypocistidis* is obtained. See *Hypocistis.*

Cytiso-geni'sta. Common broom. See *Spartium.*

Cyzemer. A painful swelling of the wrists.

Cyzice'nus. A plaster for wounds of the nerves.

D.

D. This letter signifies vitriol in the old chemical alphabet.

Dacne'rus. (From δακνω, to bite.) Biting. Pungent. An epithet for a sharp collyrium, or eye-wash, composed of burnt copper, pepper, cadmia, myrrh, and opium.

Dacry'dium. (From δακρυ, a tear.) The inspissated juice of scammony. It is in small drops, and therefore called a tear.

Dacrygelo'sis. (From δακρυω, to weep, and γελαω, to laugh.) A species of insanity, in which the patient weeps and laughs at the same time.

Dacryo'des. (From δακρυω, to weep.) A sanious ulcer. A weeping sore.

Dacryo'ma. (From *δακρυω*, to weep.) A closing of one or more of the puncta lachrymalia, causing an effusion of tears.

Dactyle'thra. (From *δακτυλος*, a finger.) A species of bougies shaped like a finger, to excite vomiting.

Dactyle'tus. (From *δακτυλος*, the date.) The hermodactylus.

Da'ctylius. (From *δακτυλος*, a finger.) A round pastil troche, or lozenge, shaped like a finger.

Da'ctylus. (From *δακτυλος*, a finger; so called from the likeness of its fruit to a finger.) The date. See *Phœnix dactylifera.*

Dæ'dium. (From *δαις*, a torch.) A small torch or candle. A bougie.

Dæmonoma'nia. (From *δαιμων*, a dæmon, and *μανια*, madness.) That species of melancholy, where the patient supposes himself to be possessed by devils.

Daisy, common. See *Bellis perennis.*

Daisy, ox-eye. See *Chrysanthemum leucanthemum.*

DALE, Samuel, was born in 1659. After practising as an apothecary, he became a licentiate of the college of physicians, and settled at Bocking, where he continued till his death in 1739. He was also chosen a fellow of the Royal Society. In 1693 he published his "Pharmacologia," an Introduction to the Materia Medica, which he afterwards much enlarged and improved: the work was well received, and passed through many editions. He also gave a good account of the natural productions about Harwich and Dover Court.

Damask rose. See *Rosa centifolia.*

Damna'tus. (From *damno*, to condemn.) The dry useless fæces, left in a vessel after the moisture has been distilled from it, is called terra damnata, or *caput mortuum.*

Damson. The fruit of a variety of the *prunus domestica*, which see.

Dandelion. See *Leontodon Taraxacum.*

Dandrif. See *Pityriasis.*

Dane-wort. See *Sambucus Ebulus.*

DA'PHNE. (*Daphne*, *δαφνη*: from *δαω*, to burn, and *φωνη*, a noise; because of the noise it makes when burnt.) The name of a genus of plants in the Linnæan system. Class, *Octandria.* Order, *Monogynia.* The laurel, or bay-tree.

Da'phne alpi'na. *Chamælea. Chamelæa.* The herb widow-wail, or *Daphne alpina* of Linnæus. A sort of dwarf olive-tree; said to be purgative in the dose of ʒjj. The mezereon is also so called, because it has leaves like the olive-tree.

Daphne, flax-leaved. See *Daphne Gnidium.*

Da'phne gni'dium. The systematic name of the tree which affords the garou. *Thymelæa. Oneoron.* Spurge-flax. Flax-leaved Daphne. This plant, *Daphne gnidium; panicula terminali foliis lineari-lanceolatis acuminatis* of Linnæus, affords the *garou bark*, which very much resembles that of our mezereum. Garou bark is to be immersed in vinegar for about an hour before it is wanted; a small piece, the size of a sixpence, thus steeped, is applied to the arm or any other part, and renewed once a day in winter and twice in summer. It produces a serous exudation from the skin without irritating or blistering. It is recommended, and is in frequent use in France and Russia, against some diseases of the eyes.

Da'phne laure'ola. The systematic name of the spurge laurel. *Laureola.* Spurge laurel. The bark of this plant, *Daphne laureola* of Linnæus, is recommended to excite a discharge from the skin, in the same way as that of the *thymelæa.*

Da'phne meze'reum. The systematic name of the mezereon. *Mezereum.* Spurge-olive. Widow-wail. This plant, *Daphne mezereum floribus sessilibus ternis caulinis, foliis lanceolatis deciduis*, of Linnæus, is extremely acrid, especially when fresh, and, if retained in the mouth, excites great and long-continued heat and inflammation, particularly of the mouth and fauces; the berries also have the same effects, and, when swallowed, prove a powerful corrosive poison, not only to man, but to dogs, wolves, and foxes. The bark of the root is the part employed medicinally in the *decoctum sarsaparillæ compositum*, intended to assist mercury in resolving nodes and other obstinate symptoms of syphilis. The antisyphilitic virtues of mezereum, however, have been by many writers very justly doubted. The result of my own experience (says Mr. Pearson, of the Lock Hospital) by no means accords with the representation given of this root by former writers. From all that I have been able to collect, in the course of many years' observation, I feel myself authorised to assert, unequivocally, that the mezereum has not the power of curing the venereal disease in any one stage, or under any one form. If a decoction of this root should ever reduce a venereal node, where no mercury has been previously given, yet the patient will by no means be exempted from the necessity of employing mercury for as long a space of time, and in as large a quantity, as if no mezereum had been taken. With respect to the power it is said to possess, of alleviating the pain, and diminishing the bulk of membranous nodes, nothing peculiar and appropriate can be ascribed to the mezereum on these accounts, since we obtain the same good effects from sarsaparilla, guaiacum, volatile alkali, blistering plasters, &c. Nevertheless, venereal nodes, which have subsided under the use of any of these articles of the materia medica, will appear again, and often with additional symptoms, if a full and efficacious course of mercury be not submitted to. It has, indeed, been alleged that mezereum always alleviates the pain occasioned by a venereal node, and generally reduces it, where the periosteum only is affected; and that it seldom fails of removing those enlargements of the periosteum which have not yielded during the administration of mercury.

That some instances of success, in cases like these, may have fallen to the share of those who made the assertion, it would not become me to deny; but I have met with few such agreeable evidences of the efficacy of this medicine. I have given the mezereum in the form of a simple decoction, and also as an ingredient in compound decoctions of the woods, in many cases, where no mercury had been previously employed, but never with advantage to a single patient. I have also tried it, in numerous instances, after the completion of a course of mercury; yet, with the exception of two cases, where the thickened state of the periosteum was removed during the exhibition of it, I never saw the least benefit derived from taking this medicine. In a few cases of anomalous pains, which I supposed were derived from irregularities during a mercurial course, the mezereum was of service, after I had tried the common decoction of the woods without success; but even in this description of cases, I have always found it a very uncertain remedy. I have made trial of this vegetable in a great number of scrofulous cases, where the membranes covering the bones were in a diseased state, and I am not sure that one single patient obtained any evident and material benefit from it.

The late Dr. Cullen, whose reports may justly claim attention from all medical men, when treating of the mezereum, in his Materia Medica, says, "I have frequently employed it in several cutaneous affections, and sometimes with success." It were to have been wished, that the professor of medicine had specified what those diseases of the skin were, in which the mezereum was sometimes employed with success; for, if I except an instance or two of lepra, in which the decoction of this plant conferred a temporary benefit, I have very seldom found it possessed of medicinal virtue, either in syphilis, or in the sequelæ of that disease, in scrofula, or in cutaneous affections. Indeed the mezereum is of so acrimonious a nature, often producing heat and other disagreeable sensations in the fauces, and, on many occasions, disordering the primæ viæ, that I do not often subject my patients to the certain inconveniences which are connected with the primary effects of this medicine, as they are rarely compensated by any other important and useful qualities.

Daphnelæ'on. (From δαφνη, the laurel, and ελαιον, oil.) The oil of bay-berries.

Daphni'tis. (From δαφνη, the laurel.) A sort of cassia resembling the laurel.

Daphnoi'des. (From δαφνη, the laurel, and ειδος, a likeness.) The herb spurge laurel.

Da'rsin. (From *darzin*, Arab.) The grosser sort of cinnamon.

Da'rsis. (From δερω, to excoriate.) An excoriation.

DA'RTOS. (From δερω, to excoriate; so called from its raw and excoriated appearance.) The part so called, under the skin of the scrotum, is by some anatomists considered as a muscle, although it appears to be no more than a condensation of the cellular membrane lining the scrotum. It is by means of the dartos that the skin of the scrotum is corrugated and relaxed.

DARWIN, Erasmus, was born at Elton in Nottinghamshire, in 1731. After studying at Cambridge and Edinburgh, and becoming doctor of medicine, he went to settle at Litchfield. He had soon after the good fortune to succeed in the cure of a gentleman in the neighbourhood, who was so ill of a fever, as to have been given over by the physician previously in attendance: this speedily procured him very extensive practice. He soon after married, and by his first wife had three sons, of whom only one survived him. At the age of 50, he married again, and removed to Derby, where he continued till his death in 1802, leaving six children by his second wife. The active life he led, and his very temperate habits, preserved his health and faculties in a great degree unimpaired. He distinguished himself more as a poet, than by professional improvements: though he certainly suggested some ingenious methods of practice: but warned by preceding examples, he avoided publishing any material poem, till his medical fame was thoroughly established. His "Botanic Garden," and Zoonomia," are well known, but they have long ceased to be popular: and the philosophy of the latter work, which advocates materialism, is justly censured. He communicated to the College of Physicians an account of his successful use of digitalis in dropsy, and some other diseases, which was published in their Transactions. His son *Charles*, who died while studying at Edinburgh, obtained a gold medal by an Essay on the distinction of Pus and Mucus; and left another unfinished on the Retrograde Action of the Absorbents: which were published after his death by his father.

Dasy'mna. (From δασυς, rough.) A scabby roughness of the eye-lids.

Da'sys. (Δασυς, rough.) A dry, parched tongue. Difficult respiration.

Date plum, Indian. See *Diospyrus lotus.*

Date. See *Dactylus.*

DATU'RA. (Blanchard says it is derived from the Indian word *datiro*, of which he knows not the meaning.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*.

Datu'ra stramo'nium. The systematic name of the thorn-apple. *Stramonium. Dutray. Barryo coccalon. Solanum mania-*

cum of Dioscorides, and *Stramonium spinosum* of Gerard. *Solanum fœtidum* of Bauhin. *Strammonium majus album*. Common thorn-apple. *Datura stramonium; pericarpiis spinosis erectis ovatis, foliis ovatis glabris*, of Linnæus. This plant has been long known as a powerful narcotic poison. In its recent state it has a bitterish taste, and a smell somewhat resembling that of poppies, especially if the leaves be rubbed between the fingers. Instances of the deleterious effects of the plant are numerous, more particularly of the seed. An extract prepared from the seeds is recommended by Baron Stoerck in maniacal, epileptic, and convulsive affections; and is said by some to succeed, while, in the hands of others, it has failed. In this country, says Dr. Woodville, we are unacquainted with any practitioners whose experience tends to throw light on the medical character of this plant. It appears to us, continues Dr. Woodville, that its effects as a medicine are to be referred to no other power than that of a narcotic. And Dr. Cullen, speaking on this subject, says, "I have no doubt that narcotics may be a remedy in certain cases of mania and epilepsy; but I have not, and I doubt if any other person has, learned to distinguish the cases to which such remedies are properly adapted. It is therefore that we find the other narcotics, as well as the stramonium, to fail in the same hands in which they had in other cases seemed to succeed. It is this consideration that has occasioned my neglecting the use of stramonium, and therefore prevented me from speaking more precisely from my own experience on this subject."

The extract of this plant has been the preparation usually employed from one to ten grains and upwards a day; but the powdered leaves, prepared after the manner of those of hemlock, would seem to be more certain and convenient. Greding found the strength of the extract to vary exceedingly; that which he obtained from Ludwig was much more powerful than that which he had of Stoerck. Externally, the leaves of stramonium have been applied to inflammatory tumours and burns, and it is said with success, and of late, the dried leaves have been smoked as a remedy in asthma; but it does not appear that they have been more efficacious in this way than tobacco.

DAUBENTON, LEWIS MARY, was born in Burgundy, 1716. Having become doctor of medicine at the age of 24, he went to Paris, and being very zealous in the study of comparative anatomy, the office of keeper of the royal cabinet of natural history was procured for him by the celebrated M. de Buffon. He contributed materially to enrich the splendid work of that eminent naturalist, by furnishing the anatomy both of man and animals. He was a member of several distinguished societies, among others of the Royal Academy of Sciences a Paris, to which he made some useful communications. Having escaped the revolutionary horrors in France, he was chosen, in 1799, a member of the Conservative Senate: but he died towards the end of the same year.

DAUCI'TES VI'NUM. Wild carrot-seeds steeped in must.

DAU'CUS. (Απο του δαυειν, from its relieving the colic, and discussing flatulencies.) The carrot.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

2. The pharmacopœial name of the garden carrot. See *Daucus carota*.

DAU'CUS ALSA'TICUS. The *oreoselinum pratense* of Linnæus.

DAU'CUS A'NNUUS MI'NOR. The *caucalis anthriscus* of Linnæus.

DAU'CUS CARO'TA. The systematic name of the carrot plant. *Daucus. Daucus sylvestris. Pastinaca sylvestris tenuifolia officinarum.* The cultivated root of the *Daucus carota; seminibus hispidis, petiolis subtus nervosis* of Linnæus, scraped and applied in the form of a poultice, is an useful application to phagedænic ulcers, and to cancers and putrid sores. The seeds, which obtain a place in the materia medica, have a light aromatic smell, and a warm acrid taste, and are esteemed for their diuretic qualities, and for their utility in calculous and nephritic complaints, in which an infusion of three spoonfuls of the seeds in a pint of boiling water, has been recommended; or the seeds may be fermented in malt liquor, which receives from them an agreeable flavour, resembling that of lemon-peel. The boiled root is said by many to be difficult of digestion; but this is the case only when the stomach is weak. It contains a considerable quantity of the saccharine principle, and is very nutritious.

DAU'CUS CRE'TICUS. See *Athamanta Cretensis*.

DAU'CUS SATI'VUS. A variety of the *daucus carota*, whose seeds are preferred by some practitioners.

DAU'CUS SEPRI'NIUS. Common chervil.

DAU'CUS SYLVE'STRIS. Wild carrot, or bird's nest. The seeds of the wild plant are said to be more efficacious than those of the garden carrot; they possess demulcent and aromatic qualities, and are given, in infusion, or decoction, in calculous complaints.

Dead nettle. See *Lamium album*.

Deadly nightshade. See *Atropa Belladonna*.

DEAFNESS. It is occasioned by any thing that proves injurious to the ear, as loud noises from the firing of cannon, violent colds, particularly affecting the head, inflammation or ulceration of the membrane, hard wax, or other substances interrupting sounds; too great a dryness, or too much moisture in the parts; or by atony, debility, or paralysis of the auditory nerves. In some instances it ensues in consequence of preceding diseases, such as fever, syphilis, &c. and in others it depends upon an original defect in the structure or formation of the ear. In the last instance, the person is usually not only deaf but likewise dumb. See *Paracusis*.

Dearticula'tio. (From *de*, and *articulus*, a joint.) Articulation admitting evident motion.

Deascia'tio. (From *de*, and *ascio*, to chip, as with a hatchet.) A bone splintered on its side.

Decamy'ron. (From δεκα, ten, and μυρον, an ointment.) An aromatic ointment, mentioned by Oribasius, containing ten ingredients.

Decide'ntia. (From *decido*, to fall down.) *Cataptosis.* Any change prolonging acute diseases.

DECI'DUA. (*Decidua*, sc. *membrana*; from *decido*, to fall down.) *Membrana decidua.* A very thin and delicate membrane or tunic, which adheres to the gravid uterus, and is said to be a reflexion of the chorion, and, on that account, is called *decidua reflexa*. The tunica decidua comes away after delivery, in small pieces, mixed with the *lochia*.

Decima'nus. (From *decem*, ten, and *mane*, the morning.) Returning every tenth day, applied to some erratic fevers.

Decli'vis. (From *de*, and *clivis*, a hill.) Declining, descending. A name of an abdominal muscle, because of its posture.

DECO'CTUM. (From *decoquo*, to boil.) A decoction. Any medicine made by boiling in a watery fluid. In a chemical point of view, it is a continued ebullition with water, to separate such parts of bodies as are only soluble at that degree of heat. The following are among the most approved decoctions.

Deco'ctum a'lbum. See *Mistura Cornu usti.*

Deco'ctum a'loes compo'situm. Compound decoction of aloes. Take of extract of liquorice, half an ounce; subcarbonate of potash, two scruples; extract of spiked aloe powdered, myrrh powdered, saffron stigmata, of each a drachm; water, a pint. Boil down to twelve fluid ounces, and strain; then add compound tincture of cardamoms, four fluid ounces. This decoction, now first introduced into the London Pharmacopœia, is analogous to an article in very frequent use, invented by the late Dr. Devalingin, and sold under the name of *beaume de vie*. By the proportion of tincture which is added, it will keep unchanged for any length of time.

Deco'ctum althæ'æ. Decoction of marsh mallows. Take of dried marsh mallow roots, ℥iv; raisins of the sun stoned, ʒjj; water, ℔vjj. Boil to five pounds; place apart the strained liquor, till the fæces have subsided, then pour off the clear part. This preparation, directed in the Edinburgh Pharmacopœia, may be exhibited as a common drink in nephralgia, and many diseases of the urinary passages, with advantage.

Deco'ctum anthe'midis. See *Decoctum chamæmeli.*

Deco'ctum astra'gali. Take of the root of the astragalus excapus, ℥j; distilled water, ℔jjj. These are to be boiled, till only a quart of fluid remain. The whole is to be taken, a little warmed, in the course of 24 hours. This remedy was tried very extensively in Germany, and said to evince very powerful effects, as an antisyphilitic.

Deco'ctum barda'næ. Take of bardana root, ℥vj; of distilled water, ℔vj. These are to be boiled till only two quarts remain. From a pint to a quart in a day is given, in those cases where sarsaparilla and other remedies that are called alterative are supposed to be requisite.

Deco'ctum chamæme'li. Chamomile decoction. Take of chamomile flowers, ℥j; caraway seeds, ℥ss; water, ℔v. Boil fifteen minutes, and strain. A very common and excellent vehicle for tonic powders, pills, &c. It is also in very frequent use for fomentation, and clysters.

Deco'ctum cincho'næ. Decoction of cinchona, commonly called decoction of Peruvian bark. Take of lance-leaved cinchona bark bruised, an ounce; water, a pint. Boil for ten minutes, in a vessel slightly covered, and strain the decoction while hot. According to the option of the practitioner, the bark of either of the other species of cinchona, the cordifolia, or *yellow*, or the oblongifolia, or *red*, may be substituted for the lancifolia, or *quilled*; which is here directed. This way of administering the bark is very general, as all the other preparations may be mixed with it, as necessity requires. It is a very proper fomentation for prolapsus of the uterus and rectum.

Deco'ctum co'rnu. See *Mistura Cornu usti.*

Deco'ctum cydo'niæ. *Mucilago seminis cydonii mali. Mucilago seminum cydoniorum.* Decoction of quince seeds. Take of quince seeds, two drachms; water, a pint. Boil over a gentle fire for ten minutes, then strain. This decoction, in the new London Pharmacopœia, has been removed from among the mucilages, as being less dense than either of the others, and as being employed in larger doses, like other mucilaginous decoctions. In addition to gum, it contains other constituent parts of the seeds, and is, therefore, more apt to spoil than common mucilage, over which it possesses no other advantages, than that it is more grateful, and sufficiently thin, without further dilution, to form the bulk of any liquid medicine. Its virtues are demulcent. Joined with syrup of mulberry, and a little borax, it is useful against aphthæ of the mouth and fauces.

Deco′ctum da′phnes meze′rei. Decoction of mezereon. Take of the bark of mezereon root, ℥jj; liquorice root bruised, ℥ss; water, ℔jjj. Boil it, with a gentle heat, down to two pounds, and strain it. From four to eight ounces of this decoction may be given four times a day, in some obstinate venereal and rheumatic affections. It operates chiefly by perspiration.

Deco′ctum dulcama′ræ. Decoction of woody nightshade. Take of woody nightshade stalks, newly gathered, ℥j; distilled water, ℔jss. These are to be boiled away to a pint, and strained. The dose is half an ounce to two ounces, mixed with an equal quantity of milk. This remedy is employed in inveterate cases of scrophula; in cancer and phagedæna; in lepra and other cutaneous affections; and in anomalous local diseases, originating in venereal lues.

Deco′ctum Geoffræ′æ ine′rmis. Decoction of cabbage-tree plant. Take of bark of the cabbage-tree, powdered, ℥j; water, ℔jj. Boil it, with a gentle fire, down to one pound, and strain. This is a powerful anthelmintic. It may be given in doses of one table-spoonful to children, and four to adults. If disagreeable symptoms should arise from an over-dose, or from drinking cold water during its action, we must immediately purge with castor-oil, and dilute with acidulated drinks.

Deco′ctum guai′aci officina′lis compo′situm. *Decoctum lignorum.* Compound decoction of guaiacum, commonly called decoction of the woods. Take of guaiacum raspings, ℥jjj; raisins stoned, ℥jj; sassafras root, liquorice, each ℥j; water, ℔x. Boil the guaiacum and raisins, with the water, over a gentle fire, to the consumption of one half; adding, towards the end, the sassafras and liquorice. Strain the liquor without expression. This decoction possesses stimulant and diaphoretic qualities, and is generally exhibited in rheumatic and cutaneous diseases, which are dependent on a vitiated state of the humours. It may be taken by itself, to the quantity of a quarter of a pint, twice or thrice a day, or used as an assistant in a course of mercurial or antimonial alteratives; the patient, in either case, keeping warm, in order to promote the operation of the medicine.

Deco′ctum helle′bori a′lbi. Decoction of white hellebore. Take of the root of white hellebore powdered, by weight, ℥j; water, two pints; rectified spirits of wine, ℥jj by measure. Boil the water, with the root, to one pint; and the liquor being cold and strained, add to it the spirit. This decoction, in the last London Pharmacopœia, is called decoctum veratri. It is a very efficacious application, externally, as a wash, in tinea capitis, lepra, psora, &c. When the skin is very tender and irritable, it should be diluted with an equal quantity of water.

Deco′ctum ho′rdei. *Decoctum hordei distichi. Aqua hordeata.* Take of pearl barley, ℥jj; water, four pints and a half. First wash away any adhering extraneous substances with cold water; next, having poured upon the barley half a pint of water, boil for a few minutes. Let this water be thrown away, and add the remainder of the water boiling; then boil down to two pints and strain. Barley water is a nutritive and softening drink, and the most proper of all liquors in inflammatory diseases. It is an excellent gargle in inflammatory sore throats, mixed with a little nitre.

Deco′ctum ho′rdei compo′situm. *Decoctum pectorale.* Compound decoction of barley. Take of decoction of barley, two pints; figs sliced, ℥jj; liquorice root, sliced and bruised, ℥ss; raisins stoned, ℥jj; water, a pint. Boil down to two pints, and strain. From the pectoral and demulcent qualities of this decoction, it may be administered as a common drink in fevers and other acute disorders, in catarrh, and several affections of the chest.

Deco′ctum ho′rdei cum gu′mmi. Barley water, ℔jj; gum arab. ℥j. The gum is to be dissolved in the barley decoction whilst warm. It then forms a suitable diluent in strangury, dysury, &c. for the gum, finding a passage into the bladder in an unaltered state, mixes with the urine, and prevents the action of its neutral salts on the urinary canal.

Deco′ctum Liche′nis. Decoction of liverwort. Take of liverwort, one ounce; water a pint and a half. Boil down to a pint, and strain. The dose is from ℥j to ℥iv.

Deco′ctum lobe′liæ. Take a handful of the roots of the lobelia syphilitica; distilled water, ℔xjj. These are to be boiled in the usual way, till only four quarts remain. The very desirable property of curing the venereal disease has been attributed to this medicine; but it is not more to be depended on than guaiacum, or other vegetable substances, of which the same thing has been alleged. The effects of this decoction are purgative; and the manner of taking it, as described by Swediaur, is as follows: — The patient is to begin with half a pint twice a day. The same quantity is then to be taken four times a day, and continued so long as its purgative effect is not too considerable. When the case is otherwise, it is to be discontinued for three or four days, and then had recourse to again till the cure is completed. As this is a remedy on the old system, and not admitted into our pharmacopœias, little confidence ought to be placed in it.

Deco′ctum Lusita′nicum. Take of sliced sarsaparilla, lignum sassafras, lignum santalum rubrum, officinal lignum guaiacum, of each one ounce and a half; of the root of mezereon, coriander seed, of each half an ounce; distilled water, ten pounds. These are to be boiled till only half the fluid remains. The dose is a quart or more in a day.

"Take of sliced sarsaparilla, lignum santalum rubrum, lignum santalum citrinum, of each ℥jss; of the root of glycyrrhiza and mezereon, of each ʒjj; of lignum rhodii, officinal lignum guaiacum, and lignum sassafras, of each ℥ss; of antimony, ℥j; distilled water, ℔v." These ingredients are to be macerated for twenty-four hours, and afterwards boiled, till the fluid is reduced to half its original quantity. From one to four pints are given daily.

The late Mr. Hunter notices this and also the following formula, in his Treatise on the Venereal Disease.

"Take of sliced sarsaparilla, of the root of China, of each ℥j; walnut peels dried, xx; antimony, ℥jj; pumice-stone, powdered, ℥j; distilled water, ℔x. The powdered antimony and pumice-stone are to be tied in separate pieces of rag, and boiled along with the other ingredients." This last decoction is reckoned to be the genuine Lisbon diet drink, whose qualities have been the subject of so much encomium.

Deco′ctum ma′lvæ compo′situm. *Decoctum pro enemate. Decoctum commune pro clystere.* Compound decoction of mallows. Take of mallows dried, an ounce; chamomile flowers dried, half an ounce; water, a pint. Boil for a quarter of an hour, and strain. A very excellent form for an emollient clyster. A variety of medicines may be added to answer particular indications.

Deco′ctum meze′rei. See *Decoctum daphnes mezerei.*

Deco′ctum papa′veris. *Decoctum pro fomento. Fotus communis.* Decoction of poppy. Take of white poppy capsules bruised, ℥iv; water, four pints. Boil for a quarter of an hour, and strain. This preparation possesses sedative and antiseptic properties, and may be directed with advantage in sphacelus, &c.

Deco′ctum pro ene′mate. See *Decoctum malvæ compositum.*

Deco′ctum pro fome′nto. See *Decoctum papaveris.*

Deco′ctum que′rcus. Decoction of oak bark. Take of oak bark, ℥j; water, two pints. Boil down to a pint, and strain. This astringent decoction has lately been added to the Lond. Pharm. and is chiefly used for external purposes. It is a good remedy in prolapsus ani, and may be used also in some cases as an injection.

Deco′ctum sarsapari′llæ. Decoction of sarsaparilla. Take of sarsaparilla root, sliced, ℥iv; boiling water, four pints. Macerate for four hours, in a vessel lightly covered, near the fire; then take out the sarsaparilla and bruise it. After it is bruised, put it again into the liquor, and macerate it in a similar manner for two hours more; then boil it down to two pints, and strain.

This decoction is much extolled by some practitioners, in phthisis, and to restore the strength after a long course of mercury.

Deco′ctum sarsapari′llæ compo′situm. Compound decoction of sarsaparilla. Take of decoction of sarsaparilla, boiling, four pints; sassafras root sliced, guaiacum wood shavings, liquorice root bruised, of each an ounce; mezereon root bark, ʒjjj. Boil for a quarter of an hour, and strain. The alterative property of the compound is very great; it is generally given after a course of mercury, where there have been nodes and indolent ulcerations, and with great benefit. The dose is from half a pint to a pint in twenty-four hours.

Deco′ctum se′negæ. Decoction of senega. Take of senega root, ℥j; water, two pints. Boil down to a pint, and strain. This is now first introduced into the Lond. Pharm. as being a useful medicine, especially in affections of the lungs, attended with debility and inordinate secretion.

Deco′ctum u′lmi. Decoction of elm bark. Take of fresh elm bark bruised, four ounces; water, four pints. Boil down to two pints, and strain. This may be employed with great advantage as a collyrium in chronic ophthalmia. It is given internally in some cutaneous eruptions.

Deco′ctum vera′tri. See *Decoctum hellebori albi.*

Decolla′tio. (From *decollo*, to behead.) The loss of a part of the skull.

DECOMPOSITION. A separation of parts. See *Analysis.*

Decortication. (From *de*, from, and *cortex*, bark.) The stripping of any thing of its bark, husk, or shell: thus almonds, and the like, are decorticated, that is, deprived of their pellicle, when ordered for medicinal purposes.

DECREPITATION. (From *decrepo*, to crackle.) A kind of crackling noise, which takes place in bodies when heated: it is peculiar to some kinds of salts; as muriate of soda, &c.

DECUSSATION. (From *decutio*, to divide.) When nerves, or muscular fibres, cross one another, they are said to decussate each other.

Decusso′rium. (From *decusso*, to divide.) An instrument to depress the dura mater, after trepanning.

Defensi′va. (From *defendo*, to preserve.) Cordial medicines, or such as resist infection.

DE′FERENS. (From *defero*, to convey; because it conveys the semen to the vesiculæ seminales.) See *Vas deferens.*

DEFLAGRATION. (From *deflagro*, to burn.) Calcination. A chemical term, chiefly employed to express the burning or setting fire to any substance; as nitre, sulphur, &c.

DEFLUXION. (From *defluo*, to run off.) *Defluxio.* A falling down of humours from a superior to an inferior part. Many writers mean nothing more by it than inflammation.

DEGLUTITION. (From *deglutio*, to swallow down.) A natural action, by which the masticated bole or a fluid is conveyed from the mouth into the fauces, and from thence through the œsophagus into the stomach.

De′gmus. (From δακνω, to bite.) A biting pain in the orifice of the stomach.

DEIDIER, Anthony, was son of a surgeon of Montpelier. Having graduated in medicine in 1691, he was six years after made professor of chemistry. In 1732, being appointed physician to the Galleys, he went to Marseilles, where he died in 1746. He published, among many other works on different branches of medicine, "Experiments on the Bile, and the Bodies of those who died of the Plague," which occurred while he was at Marseilles. He states that he tried mercurial inunctions, but they had no effect on the disease. There are three volumes of consultations and observations by him deserving of perusal. The rest of his works are scarcely now referred to.

Deje′ctio alvi′na. Discharge of excrement by stool.

Dejecto′ria. (From *dejicio*, to cast out.) Purging medicines.

Deino′sis. (From δεινοω, to exaggerate.) An enlargement of the supercilia.

Delachrymati′va. (From *de*, and *lachryma*, a tear.) Medicines which dry the eyes, first purging them of tears.

Dela′psio. (From *delabor*, to slip down.) A falling down of the anus, uterus, or intestines.

DELETERIOUS. (*Deleterius*; from δηλεω, to hurt or injure.) Those substances are so called which are of a poisonous nature.

DELIQUESCENCE. Deliquation, or the gradual melting down of crystallized salts, from exposure to the air.

Deli′quium a′nimi. (*Deliquium*; from *delinquo*, to leave.) See *Syncope*.

DELI′RIUM. (From *deliro*, to rave.) A febrile symptom, consisting in the persons acting or talking unreasonably. It is to be carefully distinguished from an alienation of the mind, without fever.

Deloca′tio. (From *de*, from, and *locus*, a place.) A dislocation, or putting any part out of its proper place.

DELPHI′NIUM. (From δελφινος, the dolphin.) Larkspur; so called from the likeness of its flower to the dolphin's head. The name of a genus of plants in the Linnæan system. Class, *Polyandria*. Order, *Trigynia*.

Delphi′nium conso′lida. The systematic name of the *consolida regalis*. *Calcatrippa.* Many virtues are attributed to this plant, *Delphinium consolida; nectariis monophyllis, caule subdiviso*, of Linnæus. The flowers are bitter, and a water distilled from them is recommended in ophthalmia. The herb has been administered in calculous cases, obstructed menses, and visceral diseases.

Delphi′nium staphisa′gria. The systematic name of stavesacre. *Staphisagria. Staphis. Pedicularia.* Stavesacre. *Delphinum staphisagria; nectariis tetraphyllis petalo brevioribus, foliis palmatis, lobis obtusis*, of Linnæus. The seeds, which are the only parts directed for medicinal use, are usually imported here from Italy; they are large, rough, of an irregular triangular figure, and of a blackish colour on the outside, but yellowish within; their smell is disagreeable, and somewhat fetid; to the taste they are very bitter, acrid, and nauseous. It was formerly employed as a masticatory, but is now confined to external use, in some kinds of cutaneous eruptions, but more especially for destroying lice and other insects; hence by the vulgar it is called louse-wort.

De′lphys. Δελφυς. The uterus, or pudendum muliebre.

De′lta. (The Greek letter, Δ.) The external pudendum muliebre is so called, from the triangular shape of its hair.

DELTOI′DES. (From δελτα, the Greek letter Δ, and ειδος, a likeness; shaped like the Greek delta.) *Sous-acromio-clavi-humeral* of Dumas. A muscle of the superior extremity, situated on the shoulder. It arises exactly opposite to the trapezius, from one-third part of the clavicle, from the acromion and spine of the scapula, and is inserted, tendinous, into the middle of the os humeri, which bone it lifts up directly; and it assists with the supraspinatus and coracobrachialis in all the actions of the humerus, except the depression; it being convenient that the arm should be raised and sustained, in order to its moving on any side.

Deme′ntia. (From *de*, and *mens*, without mind.) Madness. Delirium. Absence of intellect.

DEMULCENTS. (*Demulcentia*, sc. *medicamenta*; from *demulceo*, to soften.) Medicines suited to obviate and prevent the action of acrid and stimulant matters; and that not by correcting or changing their acrimony, but by involving it in a mild and viscid matter, which prevents it from acting upon the sensible parts of our bodies, or by covering the surface exposed to their action.

Where these substances are directly applied to the parts affected, it is easy to perceive how benefit may be derived from their application. But where they are received by the medium of the stomach, into the circulating system, it has been supposed that they can be of no utility, as they must lose that viscidity on which their lubricating quality depends. Hence it has been concluded that they can be of no service in gonorrhœa, and some similar affections. It is certain, however, says J. Murray, in his Elements of Materia Medica and Pharmacy, that many substances which undergo the process of digestion are afterwards separated, in their entire state, from the blood, by particular secreting organs, especially by the kidneys; and it is possible, that mucilaginous substances, which are the principal demulcents, may be separated in this manner. There can be no doubt, however, but that a great share of the relief demulcents afford, in irritation or inflammation of the urinary passages, is owing to the large quantities of water in which they are diffused, by which the urine is rendered less stimulating from dilution. In general, demulcents may be considered merely as substances less stimulating than the fluids usually applied.

Catarrh, diarrhœa, dysentery, calculus, and gonorrhœa, are the diseases in which demulcents are employed. As they are medicines of no great power, they may be taken in as large quantities as the stomach can bear.

The particular demulcents may be reduced to the two divisions of mucilages and expressed oils. The principal demulcents are, the acacia vera, astragalus, tragacantha, linum usitatissimum, althæa officinalis, malva sylvestris, glycyrrhiza glabra, cycas circinalis, orchis mascula, maranta arundinacea, triticum hybernum, ichthyocolla, olea Europæa, amygdalus communis, cetaceum, and cera.

Dendroli′banus. (From *δενδρον*, a tree, and *ολιϐανος*, frankincense.) The herb rosemary, or frankincense-tree.

DENS. (*Dens, -tis*, m. *Quasi edens*; from *edo*, to eat, or from *οδους, οδοντος*.) A tooth. See *Teeth*.

Many herbs have this specific name, from their fancied resemblance to the tooth of some animal; as *dens leonis*, the dandelion; *dens canis*, dog's tooth, &c.

Dens leonis. See *Leontodon Taraxacum*.

Denta′gra. (*Dentagra, οδονταγρα*: from *οδους*, a tooth, and *αγρα*, a seizure.) The tooth-ache; also an instrument for drawing the teeth.

DENTA′RIA. (*Dentaria*, from *dens*, a tooth; so called because its root is denticulated.) See *Plumbago Europæa*.

Dentarpa′ga. (From *οδους*, a tooth, and *αρπαζω*, to fasten upon.) An instrument for drawing of teeth.

Denta′ta. See *Dentatus*.

DENTA′TUS. (From *dens*, a tooth; from its tooth-like process.) *Dentata. Epistrophæus*. The second vertebra of the neck. It differs from the other cervical vertebræ, by having a tooth-like process at the upper part of the body. See *Vertebræ*.

Dentella′ria. (From *dentella*, a little tooth; so called because its root is denticulated.) The herb tooth-wort. See *Plumbago Europæa*.

De′ntes inciso′res. See *Teeth*.

De′ntes cani′ni. See *Canine teeth*.

De′ntes la′ctei. The milk-teeth. See *Teeth*, and *Dentition*.

De′ntes mola′res. See *Teeth*.

Dentidu′cum. (From *dens*, a tooth, and *duco*, to draw.) An instrument for drawing of teeth.

DENTIFRICE. (From *dens*, a tooth, and *frico*, to rub.) A medicine to clean the teeth.

Dentisca′lpium. (From *dens*, a tooth, and *scalpo*, to scrape.) An instrument for scaling teeth.

DENTITION. (From *dentio*, to breed teeth.) The breeding or cutting of the teeth. The first dentition begins about the sixth or seventh month, and the teeth are termed the *primary* or *milk* teeth. About the seventh year, these fall out, and are succeeded by others, which remain during life, and are called the *secondary* or *perennial* teeth. The last dentition takes place between the ages of twenty and five-and-twenty, when the four last grinders appear; they are called *dentes sapientæ*. See also *Teeth*.

Dentodu′cum. See *Dentiducum*.

Denuda′tio. (From *denudo*, to make bare.) A laying bare the bone.

DEOBSTRUENTS. (*Deobstruentia*, sc. *medicamenta*; from *de*, and *obstruo*, to obstruct.) Medicines that are exhibited with a view of removing any obstruction.

Deoppila′ntia. (From *de*, and *oppilo*, to stop.) *Deoppilativa*. Medicines which remove obstructions; deobstruent or aperitive medicines.

Departi′tio. (From *de*, and *partior*, to divide.) Separating metals.

Deperdi′tio. (From *deperdo*, to lose.) Abortion, or the undue loss of the fœtus.

Depeti′go. (From *de*, and *petigo*, a running scab.) A ring-worm, or tetter. A scurf, or itch, where the skin is rough.

Dephlegma′tio. (From *de*, and *phlegma*, phlegm.) The operation of rectifying or freeing spirits from their watery parts.

DEPILATORY. (*Depilatoria*, sc. *unguenta*; from *de*, of, and *pilus*, the hair.) Any application which removes the hairs from any part of the body; thus, a pitch cap pulls the hairs of the head out by the roots.

Deplu′matio. (From *de*, and *pluma*, a feather.) A disease of the eyelids, which causes the hair to fall off.

Deprehe′nsio. (From *deprehendo*, to catch unawares.) The epilepsy is so called, from the suddenness with which persons are seized with it.

Depre′ssio. (From *deprimo*, to press down.) Depression. When the bones of the skull are forced inwards by fracture, they are said to be depressed.

DEPRE′SSOR. (From *deprimo*, to press down.) Several muscles are so termed, because they depress the part on which they act.

Depre′ssor a′læ na′si. See *Depressor labii superioris alæque nasi.*

DEPRE′SSOR A′NGULI O′RIS. *Triangularis* of Winslow. *Depressor labiorum communis* of Douglas. *Depressor labiorum* of Cowper. *Sous-maxillo-labial* of Dumas. A muscle of the mouth and lip, situated below the under lip. It arises, broad and fleshy, from the lower edge of the lower jaw, near the chin; and is inserted into the angle of the mouth, which it pulls downwards.

DEPRE′SSOR LA′BII INFERIO′RIS. *Quadratus* of Winslow. *Depressor labii inferioris proprius* of Douglas and Cowper. *Mentonier labial* of Dumas. A muscle of the mouth and lip, that pulls the under lip and skin of the side of the chin downwards, and a little outwards.

DEPRE′SSOR LA′BII SUPERIO′RIS ALÆ′QUE NA′SI. *Depressor alæ nasi* of Albinus. *Incisivus medius* of Winslow. *Depressor labii superioris proprius* of Douglas. *Constrictores alarum nasi, ac depressores labii superioris* of Cowper. *Maxillo-alveoli nasal* of Dumas. A muscle of the mouth and lip, situated above the mouth, that draws the upper lip and ala nasi downwards and backwards. It arises, thin and fleshy, from the superior maxillary bone, immediately above the joining of the gums, with the two incisor teeth and cuspidatus; from thence it runs upwards, and is inserted into the upper lip and root of the ala of the nose.

Depre′ssor la′bii superio′ris pro′prius. See *Depressor labii superioris alæque nasi.*

Depre′ssor labio′rum commu′nis. See *Depressor anguli oris.*

Depre′ssor o′culi. See *Rectus inferior oculi.*

De′primens. See *Rectus inferior oculi.*

Depura′ntia. (From *depuro*, to make clean.) Medicines which evacuate impurities.

DEPURATION. The freeing a liquor or solid body from its foulness.

Depurato′rius. (From *de*, and *purus*, pure.) It is applied to fevers, which terminate in perspiration.

De′ris. (Δερις: from δερω, to excoriate.) The skin.

DERIVATION. (From *derivo*, to drain off.) The doctrines of derivation and revulsion, talked of by the antients, are now, in their sense of the terms, wholly exploded. Derivation means the drawing away any disease from its original seat to another part.

De′rma. (Δερμα.) The skin.

Dermato′des. (From δερμα, skin, and ειδος, a likeness.) Resembling skin, or leather, in its consistence. It is applied to the dura mater.

DERMATOLO′GIA. (From δερμα, the skin, and λογος, a discourse.) A discourse or treatise on the skin.

De′rtron. (From δερις, skin.) The omentum, or peritonæum, is so named, from its skin-like consistence.

DESAULT, Peter, was a native of Bourdeaux, where he graduated, and became distinguished as a practitioner in medicine about the beginning of the last century. He was author of some popular and useful dissertations on medical subjects. In syphilis he maintained that a cure could be effected without salivation; and in calculous complaints by the patient drinking the Bareges water, this being also injected into the bladder; but it probably merely palliated the symptoms. He exposed also some of the prevailing errors concerning hydrophobia; as that the patient barked like a dog, and had a propensity to bite his attendants. The precise period of his death is not mentioned.

DESAULT, Peter Joseph, was chief surgeon to the Hôtel-Dieu at Paris. He published several numbers of a surgical journal in 1791, &c.; also jointly with M. Chopart, in 1794, "A Treatise on Chirurgical Diseases, and the Operations required in their Cure;" which is allowed to have considerable merit. He attended the young King of France, Lewis XVII., in the Temple; and died under suspicious circumstances shortly before his royal patient in 1795.

Descenso′rium. (From *descendo*, to move downwards.) A vessel in which the distillation by descent is performed.

Desce′nsus. (From *descendo*, to move downwards.) The same chemists call it a distillation *per descensum*, by descent, when the fire is applied at the top and round the vessel, whose orifice is at the bottom.

DESICCATI′VA. (From *desicco*, to dry up.) Such medicines as, being applied outwardly, dry up the humours and moisture running from a wound.

Desipie′ntia. (From *desipio*, to dote.) A defect of reason. Symptomatic phrenzy.

De′sme. (From δεω, to bind up.) A bandage, or ligature.

Desmi′dion. (From δεσμη, a handful.) A small bundle, or little bandage.

De′smos. (From δεω, to bind up.) A bandage. An inflammatory stricture of a joint, after luxation.

DESPUMATION. (From *despumo*, to clarify.) The clarifying a fluid, or separating its foul parts from it.

DESQUAMATION. (From *desquamo*, to scale off.) The separating of laminæ, or scales, from a bone. Exfoliation.

Desquamato′rium. (From *desquamo*, to scale off.) A trepan, or instrument to take a piece out of the skull.

Destilla′tion. See *Distillation.*

Desuda′tio. (From *desudo*, to sweat much.) An unnatural and morbid sweating.

Dete'ntio. (From *detineo*, to stop, or hinder.) Epilepsy is so called, from the suddenness with which the patient is seized.

DETERGENTS. (From *detergo*, to wipe away.) Medicines which cleanse and remove such viscid humours as adhere to and obstruct the vessels. Also such applications as clear away foulness from ulcers.

DETONATION. (From *detono*, to make a noise.) Explosion.

Detra'ctor. (From *detraho*, to draw.) Applied to a muscle, whose office is to draw the part to which it is attached.

De'trahens quadra'tus. See *Platysma myoides*.

DETRU'SOR URI'NÆ. (From *detrudo*, to thrust out.) The name of a muscle whose office is to squeeze out the urine. The muscular coat of the urinary bladder was formerly so called.

Deu'teri. (From δευτερος, second; because it is discharged next after the fœtus.) The secundines, or after-birth.

Deuteropa'thia. (From δευτερος, second, and ϖαθος, a suffering.) An affection or suffering by consent, where a second part suffers, from consent, with the part originally affected, as where the stomach is disturbed through a wound in the head.

DEVENTER, Henry, was born in Holland, towards the end of the 17th century. He took a degree in medicine, but his practice was principally in surgery, and at last almost confined to midwifery. He distinguished himself much by his improvements in this art, as well as by his mechanical inventions for obviating deformities in children. He published some obstetrical works several years prior to his death, which occurred in 1739; after which appeared a Treatise on the Rickets in his native language, of which Haller makes favourable mention.

Devil's dung. See *Ferula assafœtida*.

Diabe'bus. (From διαϐεϐαιοω, to strengthen; so called, as affording the chief support to the foot.) The ankle-bone.

DIABE'TES. (From δια, through, and βαινω, to pass.) An immoderate flow of urine. A genus of disease in the class *neuroses*, and order *spasmi* of Cullen. There are two species of this complaint: 1. *Diabetes insipidus*, in which there is a superabundant discharge of limpid urine, of its usual urinary taste. 2. *Diabetes mellitus*, in which the urine is very sweet, and contains a great quantity of sugar. Great thirst, with a voracious appetite, gradual emaciation of the whole body, and a frequent discharge of urine, containing a large proportion of saccharine and other matter, which is voided in a quantity even exceeding that of the aliment or fluid introduced, are the characteristics of this disease. Those of a shattered constitution, and those who are in the decline of life, are most subject to its attacks. It not unfrequently attends on hysteria, hypochondriasis, dyspepsia, and asthma; but it is always much milder when symptomatic, than when it appears as a primary affection.

Diabetes may be occasioned by the use of strong diuretic medicines, intemperance of life, and hard drinking; excess in venery, severe evacuations, or by any thing that tends to produce an impoverished state of the blood, or general debility. It has, however, taken place, in many instances, without any obvious cause.

That which immediately gives rise to the disease, has ever been considered as obscure, and various theories have been advanced on the occasion. It has been usual to consider diabetes as the effect of relaxation of the kidneys, or as depending on a general colliquation of the fluids. Dr. Richter, professor of medicine in the university of Goettingen, supposes the disease to be generally of a spasmodic nature, occasioned by a stimulus acting on the kidneys; hence a *secretio aucta urinæ*, and sometimes *perversa*, is the consequence. Dr. Darwin thinks that it is owing to an *inverted* action of the urinary branch of the lymphatics; which doctrine, although it did not escape the censure of the best anatomists and experienced physiologists, met, nevertheless, with a very favourable reception, on its being first announced. The late Dr. Cullen offered it as his opinion, that the proximate cause of this disease might be some fault in the assimilatory powers, or in those employed in converting alimentary matters into the proper animal fluids, which theory has since been adopted by Dr. Dobson, and still later by Dr. Rollo, surgeon-general to the royal artillery. The liver has been thought, by some, to be the chief source of the disease; but diabetes is hardly ever attended with any affection of this organ, as has been proved by frequent dissections; and when observed, it is to be considered as accidental.

The primary seat of the disease is, however, far from being absolutely determined in favour of any hypothesis yet advanced; and, from the most attentive consideration of all the circumstances, the weight of evidence appears to induce the majority of practitioners to consider diabetes as depending on a primary affection of the kidneys.

Diabetes sometimes comes on slowly and imperceptibly, without any previous disorder; and it now and then arises to a considerable degree, and subsists long without being accompanied with evident disorder in any particular part of the system; the great thirst which always, and the voracious appetite which frequently occur in it, being often the only remarkable symptoms; but it more generally happens, that a considerable affection of the stomach precedes the coming on of the disease; and that, in its progress, besides the symptoms already mentioned, there is a great dryness in the skin, with a sense of weight in the kidneys, and a pain in the ureters, and the other urinary passages.

Under a long continuance of the disease, the body becomes much emaciated, the feet œdematous, great debility arises, the pulse is frequent and small, and an obscure fever, with all the appearance of hectic, prevails.

The urine in diabetes, from being at first insipid, clear, and colourless, soon acquires a sweetish or saccharine taste, its leading characteristic: and, when subjected to experiment, a considerable quantity of saccharine matter is to be extracted from it.

In some instances, the quantity of urine is much greater than can be accounted for from all the sources united. Cases are recorded, in which 25 to 30 pints were discharged in the space of a natural day, for many successive weeks, and even months; and in which the whole ingesta, as was said, did not amount to half the weight of the urine. To account for this overplus, it has been alleged that water is absorbed from the air by the surface of the body; as also that a quantity of water is compounded in the lungs themselves.

Dissections of diabetes have usually shewn the kidneys to be much affected. In some instances, they have been found in a loose flabby state, much enlarged in size, and of a pale ash colour; in others, they have been discovered much more vascular than in an healthy state, approaching a good deal to what takes place in inflammation, and containing, in their infundibula, a quantity of whitish fluid, somewhat resembling pus, but without any sign of ulceration whatever. At the same time that these appearances have been observed in their interior, the veins on their surface were found to be much fuller of blood than usual, forming a most beautiful net-work of vessels, the larger branches of which exhibited an absorbent appearance. In many cases of dissection, the whole of the mysentery has been discovered to be much diseased, and its glands remarkably enlarged; some of them being very hard, and of an irregular texture; others softer, and of an uniform spherical shape. Many of the lacteals have likewise been seen considerably enlarged. The liver, pancreas, spleen, and stomach, are in general perceived to be in a natural state; when they are not so, the occurrence is to be considered as accidental. The bladder, in many cases, is found to contain a considerable quantity of muddy urine.

A great variety of remedies has been proposed for this disease; but their success is generally precarious, or only temporary, at least in the mellitic form of the complaint. The treatment has been generally conducted on the principles of determining the fluids to other outlets, particularly the skin, and of increasing the tone of the kidneys. Diaphoretics are certainly very proper remedies, especially the combination of opium with ipecacuanha, or antimonials, assisted by the warm bath, suitable clothing, and perhaps removal to a milder climate: in the insipid form of diabetes, this plan has sometimes effected a cure; and it appears that the large use of opium has even the power of correcting, for the time, the saccharine quality of the urine. Cathartics are hardly of service, farther than to keep the bowels regular. Tonics are generally indicated by obvious marks of debility; and if the patient be troubled with acidity in the primæ viæ, alkaline medicines will be properly joined with them, preferring those which have no diuretic power. Astringents have been highly extolled by some practitioners, but do not appear likely to avail, except those which pass off by the urine, as uva ursi; or the milder stimulants, which can be directed to the kidneys, as copaiba, &c. may correct the laxity of those organs, if the disease depend on this cause. The tinctura lyttæ must be used with great caution, and its efficacy is not well established: and blisters to the loins can only be useful as counter-irritants, though not the most suitable. Frequent friction, especially over the kidneys, wearing a tight belt, and gentle exercise, may assist the recovery of the patient; and when the function of the skin is restored, using the bath gradually of a lower temperature, will tend greatly to obviate its suppression afterwards. It is likewise highly important to regulate the diet, especially in the mellitic diabetes. Dr. Rollo first pointed out the advantage derived from restricting the patient to a diet principally of animal food, avoiding especially those vegetables which might afford saccharine matter, the urine becoming thereby of a more healthy quality, and diminishing in quantity: but unfortunately the benefit appears but temporary, and the plan is not persevered in without distress to the patient. The same gentleman recommended also the sulphuret of potash, and still more the hydrosulphuret of ammonia; but they are very nauseous medicines, and of doubtful efficacy. Another plan of treating the disease has been more recently proposed, namely, by bleeding, and other antiphlogistic measures; and some cases of its success have been recorded: but farther experience is certainly required, before we should be justified in relying much upon it.

Diabe'tes hyste'ricus. Large discharge of urine in hysterical women.

Dia'bolus metallo'rum. Tin.

Diabo'tanum. (From δια, and βοτανη, a herb.) A plaster made of herbs.

Diaca'dmias. (From δια, and καδμια, cadmia.) The name of a plaster whose basis is cadmia.

Diacalami′nthes. (From δια, and καλαμινθη, calamint.) The name of an antidote, whose chief ingredient is calamint.

Diaca′rcinum. (From δια, and καρκινος, a crab.) The name of an antidote prepared from the flesh of crabs and cray-fish.

Diaca′ryon. (From δια, and καρυον, a nut.) Rob of nuts, or walnuts.

Diaca′ssia. (From δια, and κασσια, cassia.) Electuary of cassia.

Diacasto′rium. (From δια, and καϛωρ, castor.) An antidote whose basis is castor.

Diacatho′licon. (From δια, and καθολικος, universal.) The name of a purge, so called from its general usefulness.

Diacentau′rium. (From δια, and κενταυριον, centaury.) The Duke of Portland's powder is so called, because its chief ingredient is centaury.

Diacentro′tum. (From δια, and κεντροω, to prick.) A collyrium, so called from its pungency and stimulating qualities.

Diachalci′tis. (From δια, and χαλκιτις, chalcitis.) A plaster whose chief ingredient is chalcitis.

Diacha′lsis. (From διαχαλω, to be relaxed.) A relaxation. The opening of the sutures of the head.

Diacheiri′smus. (From δια, and χειρ, the hand.) Any operation performed by the hand.

Diachelido′nium. (From δια, and χελιδωνιον, celandine.) A plaster whose chief ingredient was the herb celandine.

Diachore′ma. (From διαχωρεω, to separate from.) *Diachoresis.* Any excretion, or excrement, but chiefly that by stool.

Diachore′sis. See *Diachorema.*

Diachri′sta. (From δια, and χριω, to anoint.) Medicines to anoint sore or bruised parts.

Diachry′sum. (From δια, and χρυσος, gold.) A plaster for fractured limbs; so named from its yellow colour.

Dia′chylum. (From δια, and χυλος, juice.) The plaster of this name was formerly made of certain juices, but it now means an emollient digestive plaster.

Dia′chysis. (From δια, and χυω, to pour out.) Fusion or melting.

Diachy′tica. (From διαχυω, to dissolve.) Medicines which discuss and dissolve tumours.

Diacine′ma. (From δια, and κινεω, to move.) A slight dislocation.

Diaci′ssum. (From δια, and κισσος, ivy.) An application composed of ivy-leaves.

Dia′clasis. (From δια, and κλαω, to break.) A small fracture.

Diacly′sma. (From διακλυζω, to wash out.) A gargarism, or wash for the mouth.

Diacoccyme′lon. (From δια, and κοκκυμηλον, a plum.) An electuary made of prunes.

Diaco′dium. (From δια, and κωδια, a poppy head.) A composition made of the heads of poppies.

Diacolocy′nthis. (From δια, and κολοκυνθις, the colocynth.) A preparation whose chief ingredient is colocynth.

Diaco′mma. (From διακοπτω, to cut through.) *Diacope.* A deep cut or wound.

Dia′cope. See *Diacomma.*

Diacopræ′gia. (From δια, κοπρος, dung, and αιξ, a goat.) A preparation with goat's dung.

Diacora′llum. (From δια, and κοραλλιον, coral.) A preparation in which coral is a chief ingredient.

Dia′crisis. (From διακρινω, to distinguish.) The distinguishing diseases one from another by their symptoms.

Diacro′cium. (From δια, and κροκος, saffron.) A collyrium in which is saffron.

Diacurcu′ma. (From δια, and κυρκουμα, turmeric.) An antidote in which is turmeric or saffron.

Diacydo′nium. (From δια, and κυδωνια, a quince.) Marmalade of quinces.

Diadaphni′dion. (From δια, and δαφνις, the laurel-tree.) A drawing-plaster in which were bay-berries.

Diade′ma. (From διαδεω, to surround.) A diadem or bandage to put round the head.

Diade′xis. (From διαδεχομαι, to transfer.) *Diadoche.* A transposition of humours from one place to another.

Dia′doche. See *Diadexis.*

Dia′dosis. (From διαδιδωμι, to distribute.) The remission of a disorder.

Diæ′resis. (From διαιρεω, to divide or separate.) A solution of continuity of the soft parts of the human body.

Diære′tica. (From διαιρεω, to divide.) Corrosive medicines.

DIÆ′TA. (From διαιταω, to nourish.) Diet; food. It means also the whole of the non-naturals. See *Diet.*

Diaglau′cium. (From δια, and γλαυκιον, the blue juice of a herb.) An eye-water made of the purging thistle.

DIAGNO′SIS. (From διαγινωσκω, to discern or distinguish.) The science which delivers the signs by which a disease may be distinguished from another disease; hence those symptoms which distinguish such affections are termed *diagnostic.*

Diagry′dium. Corrupted from dacrydium or scammony.

Diahermoda′ctylum. (From δια, and ερμοδακτυλος, the hermodactyl.) A purging medicine whose basis is the hermodactyl.

Diai′reon. (From δια, and ιρις, the lily.) An antidote in which is the root of the lily.

Diai′um. (From δια, and ιον, a violet.) A pastil whose chief ingredient is violets.

Diala′cca. (From δια, and λακκα.) An antidote in which is the lacca.

Dialago′um. (From δια, and λαγως, a hare.) A medicine in which is the dung of a hare.

Diale′mma. (From *διαλαμβανω*, to interrupt.) The remission of a disease.

Diale′psis. (From *διαλαμβανω*, to interrupt.) An intermission. Also a space left between a bandage.

Diali′banum. (From *δια*, and *λιϐανον*, frankincense.) A medicine in which frankincense is a chief ingredient.

Dia′loes. (From *δια*, and *αλοη*, the aloe.) A medicine chiefly composed of aloes.

Dialthæ′a. (From *δια*, and *αλθαια*, the mallow.) An ointment composed chiefly of mallows.

DIA′LYSIS. (From *διαλυω*, to dissolve.) A solution of continuity, or a destruction of parts.

DIA′LYSES. An order in the class *locales* of Cullen's nosology.

Dialy′tica. (From *διαλυω*, to dissolve.) Medicines which heal wounds and fractures.

Diamargari′ton. (From *δια*, and *μαργαριτης*, pearl.) An antidote in which pearls are the chief ingredient.

Diamasse′ma. (From *δια*, and *μασσομαι*, to chew.) A masticatory, or substance put into the mouth and chewed to excite a discharge of the saliva.

Dia′mbra. (From *δια*, and *αμϐρα*, amber.) An aromatic composition in which was ambergris.

Diame′lon. (From *δια*, and *μηλον*, a quince.) A composition in which are quinces.

Diami′syos. (From *δια*, and *μισυ*, misy.) A composition in which misy is an ingredient.

DIAMOND. The diamond, which was well known to the antients, is principally found in the western peninsula of India, on the coast of Coromandel, in the kingdoms of Golconda and Visapour, in the island of Borneo, and in the Brazils.

They are generally found bedded in yellow ochre, or in rocks of free-stone, or quartz, and sometimes in the beds of running waters. When taken out of the earth, they are incrusted with an exterior earthy covering, under which is another, consisting of carbonate of lime.

In the Brazils, it is supposed that diamonds might be obtained in greater quantities than at present, if the sufficient working of the diamond-mines was not prohibited, in order to prevent that dimunition of their commercial value, which a greater abundance of them might occasion.

Brazilian diamonds are, in commercial estimation, inferior to the oriental ones.

In the rough, diamonds are worth two pounds sterling the carat, or four grains, provided they are without blemish. The expense of cutting and polishing amounts to about four pounds more. The value however is far above what is now stated when they become considerable in size.

The usual method of calculating the value of diamonds is by squaring the number of carats, and then multiplying the amount by the price of a single carat; thus supposing one carat to be 2*l.* a diamond of 8 carats is worth 128*l.* being 8 × 8 × 2.

The famous Pigot diamond weighs 188 1-8th grains.

Physical Properties of Diamond.

Diamond is always crystallized, but sometimes so imperfectly, that at first sight it might appear amorphous. The figure of diamond, when perfect, is an eight-sided prism. There are also cubical, flat, and round diamonds. It is the oriental diamond which crystallizes into octohedra, and exhibits all the varieties of this primitive figure. The diamond of Brazil crystallizes into dodecahedra.

The texture of the diamond is lamellated, for it may be split or cleft with an instrument of well-tempered steel, by a swift blow in a particular direction. There are however some diamonds which do not appear to be formed of *laminæ*, but of twisted and interwoven fibres, like those of knots in wood. These exceed the others greatly in hardness, they cannot be cut or polished, and are therefore called by the lapidaries *diamonds of nature*.

The diamond is one of the hardest bodies known. It resists the most highly-tempered steel file, which circumstance renders it necessary to attack it with diamond powder. It takes an exquisite and lasting polish. It has a great refractive power, and hence its lustre, when cut into the form of a regular solid, is uncommonly great. The usual colour of diamonds is a light grey, often inclining to yellow, at times lemon colour, violet, or black, seldomer rose-red, and still more rarely green or blue, but more frequently pale brown. The purest diamonds are perfectly transparent. The colourless diamond has a specific gravity which is in proportion to that of water as 3.512 to 1.000, according to Brisson. This varies however considerably. When rubbed it becomes *positively* electric, even before it has been cut by the lapidary.

Diamond is not acted upon by acids, or by any chemical agent, oxygen excepted; and this requires a very great increase of temperature to produce any effect.

The diamond burns by a strong heat, with a sensible flame, like other combustible bodies, attracting oxygen, and becoming wholly converted into carbonic acid gas during that process.

It combines with iron by fusion, and converts it, like common charcoal, into steel; but diamond requires a much higher temperature for its combustion than common charcoal does, and even then it consumes but slowly, and ceases to burn the instant its temperature is lowered.

It is considered by modern chemists as *pure crystallized carbon*. See *Carbon*.

Diamo′ron. (From *δια*, and *μωρον*, a mulberry.) A preparation of mulberries.

Diamo'schum. (From δια, and μοσχος, musk.) An antidote in which musk is a chief ingredient.

Diamoto'sis. (From δια, and μοτος, lint.) The introduction of lint into an ulcer or wound.

Dia'na. (A name of the moon.) The chemical name for silver from its white shining appearance.

Diananca'smus. (From δια, and αναγκαζω, to force.) The forcible restoration of a luxated part into its proper place. An instrument to reduce a distorted spine.

DIA'NTHUS. (From Διs, διος, Jove, and ανθος, a flower: so called from the elegance and fragrance of its flowers.) The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Digynia*.

Dia'nthus caryophy'llus. The systematic name of the clove-pink. *Caryophyllum rubrum. Tunica. Vetonica. Betonica. Coronaria. Caryophyllus hortensis.* Clove pink. Clove gilliflower. Clove July flower. This fragrant plant, *Dianthus caryophyllus: floribus solitariis, squamis calycinis subovatis, brevissimis, corollis crenatis,* of Linnæus, grows wild in several parts of England; but the flowers, which are pharmaceutically employed, are usually produced in gardens: they have a pleasant aromatic smell, somewhat allied to that of clove-spice; their taste is bitterish and sub-adstringent. These flowers were formerly in extensive use, but are now merely employed in form of syrup, as a useful and pleasant vehicle for other medicines.

Diapa'sma. (From διαπασσω, to sprinkle.) A medicine reduced to powder and sprinkled over the body, or any part.

Diapede'sis. (From διαπηδαω, to leap through.) The transudation or escape of blood through the coats of an artery.

Diape'gma. (From διαπηγνυω, to close together.) A surgical instrument for closing together broken bones.

Diape'nte. (From δια, and πεντε, five.) A medicine composed of five ingredients.

DIAPHANOUS. (From δια, through, and φαινω, to shine.) A term applied to any substance which is transparent; as the hyaloid membrane covering the vitreous humour of the eye, which is as transparent as glass.

Diaphœ'nicum. (From δια, and φοινιξ, a date.) A medicine made of dates.

Dia'phora. (From διαφερω, to distinguish.) The distinction of diseases by their characteristic marks and symptoms.

DIAPHORE'SIS. (From διαφορεω, to carry through.) Perspiration or increased cutaneous secretion.

DIAPHORETICS. (*Diaphoretica, sc. medicamenta;* from διαφορεω, to carry through.) Medicines which, from being taken internally, increase the discharge by the skin. When this is carried so far as to be condensed on the surface, it forms sweat; and the medicines producing it are named sudorifics. Between diaphoretics and sudorifics there is no distinction; the operation is in both cases the same, and differs only in degree from augmentation of dose, or employment of assistant means. This class of medicines comprehends five orders: 1. *Pungent diaphoretics,* as the *volatile salts,* and *essential oils,* which are well adapted for the aged; those in whose system there is little sensibility; those who are difficultly affected by other diaphoretics; and those whose stomachs will not bear large doses of medicines. 2. *Calefacient diaphoretics,* such as *serpentaria contrayerva,* and *guaiacum:* these are given in cases where the circulation is low and languid. 3. *Stimulant diaphoretics,* as antimonial and mercurial preparations, which are best fitted for the vigorous and plethoric. 4. *Antispasmodic diaphoretics,* as *opium, musk,* and *camphire,* which are given to produce a diaphoresis, when the momentum of the blood is increased. 5. *Diluent diaphoretics,* as water, whey, &c. which are best calculated for that habit in which a predisposition to sweating is wanted; and in which no diaphoresis takes place, although there be evident causes to produce it.

DIAPHRA'GMA. (*-matis,* n.: from δια, and φραττω, to divide.) *Septum transversum.* The midrif, or diaphragm. A muscle that divides the thorax from the abdomen. It is composed of two muscles; the first and superior of these arises from the sternum, and the ends of the last ribs on each side. Its fibres, from this semicircular origination, tend towards their centre, and terminate in a tendon, or aponeurosis, which is termed the *centrum tendinosum.* The second and inferior muscle comes from the vertebræ of the loins by two productions, of which that on the right side comes from the first, second, and third vertebræ of the loins; that on the left side is somewhat shorter, and both these portions join and make the lower part of the diaphragm, which joins its tendons with the tendon of the other, so that they make but one muscular partition. It is covered by the pleura on its upper side, and by the peritoneum on the lower side. It is pierced in the middle, for the passage of the vena cava; in its lower part for the œsophagus, and the nerves, which go to the upper orifice of the stomach, and betwixt the productions of the inferior muscle, passes the aorta, the thoracic duct, and the vena azygos. It receives arteries and veins called phrenic or diaphragmatic, from the cava and aorta; and sometimes on its lower part two branches from the vena adiposa, and two arteries from the lumbares. It has two nerves which come from the third vertebra of the neck, which pass through the cavity of the thorax, and are lost in its substance. In its natural situation, the diaphragm is convex on the upper side towards the breast, and concave on its lower side towards the belly: therefore, when its fibres swell and contract, it must become plain on each side, and consequently the cavity of the breast is enlarged to give liberty to the lungs to receive air in inspiration; and the stomach and intestines are pressed for the distribution of their contents; hence the use of this muscle is very considerable; it is the principal agent in respiration, particularly in inspiration; for when it is in action the cavity of the thorax is enlarged, particularly at the sides, where the lungs are chiefly situated; and as the lungs must always be contiguous to the inside of the thorax and upper side of the diaphragm, the air rushes into them, in order to fill up the increased space. In expiration it is relaxed and pushed up by the pressure of the abdominal muscles upon the viscera of the abdomen; and at the same time that they press it upwards, they pull down the ribs, by which the cavity of the thorax is diminished, and the air suddenly pushed out of the lungs.

Diaphragmati'tis. (From διαφραγμα, the diaphragm.) *Diaphragmitis. Paraphrenitis.* An inflammation of the diaphragm. See *Paraphrenitis.*

Diaphragmi'tis. See *Paraphrenitis.*

Dia'phthora. (From διαφθειρω, to corrupt.) An abortion where the fœtus is corrupted in the womb.

Diaphyla'ctica. (From διαφυλασσω, to preserve.) Medicines which resist putrefaction or prevent infection.

Dia'physis. (From διαφυω, to divide.) An interstice or partition between the joints.

Diapisselæ'um. (From δια, and πισσελαιον, the oil of pitch, or liquid pitch.) A composition in which is liquid pitch.

Dia'plasis. (From διαπλασσω, to put together.) The replacing a luxated or fractured bone in its proper situation.

Diapla'sma. (From διαπλασσω, to anoint.) An unction or fomentation applied to the whole body or any part.

Dia'pne. (From διαπνεω, to blow through, or pass gently as the breath does.) An involuntary and insensible discharge of the urine.

Dia'pnoe. (From διαπνεω, to breathe through.) The transpiration of vapour through the pores of the skin.

Diapno'ica. (From διαπνεω, to transpire.) Diaphoretics or medicines which promote perspiration.

Diapore'ma. (From διαπορεω, to be in doubt.) Nervous anxiety.

Diapo'ron. (From δια, and οπωρα, autumnal fruits.) A composition in which are several autumnal fruits, as quinces, medlars, and services.

Diapra'ssium. (From δια, and πρασσιον, horehound.) A composition of horehound.

Diapru'num. (From δια, and προυνη, a prune.) An electuary of prunes.

Diapso'ricum. (From δια, and ψωρα, the itch or scurvy.) A medicine for the itch or scurvy.

Diapte'rnes. (From δια, and πτερνα, the heel.) A composition of cow heels and cheese.

Diaptero'sis. (From δια, and πτερον, a feather.) The cleaning the ears with a feather.

Diapye'ma. (From δια, and πυον, pus.) A suppuration or abscess.

Diapye'mata. (From διαπυημα, a suppuration.) Suppurating medicines.

Diapye'tica. (From διαπυημα, a suppuration.) See *Diapyemata.*

Diarho'cha. (From δια, and ρηχος, a space.) The space between the foldings of a bandage.

Dia'rius. (From *dies*, a day.) A term applied to fevers which last but one day.

Diaroma'ticum. (From δια, and αρωματικον, an aromatic.) A composition of spices.

Dia'rrhage. (From διαρρηγνυμι, to break asunder.) A fracture of the temple bones.

Diarrhodo'meli. (From δια, ροδον, a rose, and μελι, honey.) Scammony, agaric, pepper and honey.

Dia'rrhodon. (From δια, and ροδον, a rose.) A composition of roses.

DIARRHŒ'A. (From διαρρεω, to flow through.) A purging. It is distinguished by frequent stools with the natural excrement, not contagious, and seldom attended with pyrexia. It is a genus of disease in the class *neuroses*, and order *spasmi* of Cullen, containing the following species: 1. *Diarrhœa crapulosa.* The feculent diarrhœa, from *crapulus*, one who overloads his stomach. 2. *Diarrhœa biliosa.* The bilious, from an increased secretion of bile. 3. *Diarrhœa mucosa.* The mucous, from a quantity of slime being voided. 4. *Diarrhœa hepatirrhœa.* The hepatic, in which there is a quantity of serous matter, somewhat resembling the washings of flesh, voided; the liver being primarily affected. 5. *Diarrhœa lienterica.* The lientery; when the food passes unchanged. 6. *Diarrhœa cœliaca.* The cœliac passion: the food passes off in this affection in a white liquid state like chyle. 7. *Diarrhœa verminosa.* Arising from worms. Diarrhœa seems evidently to depend on an increase of the peristaltic motion, or of the secretion of the intestines; and besides the causes already noticed, it may arise from many others, influencing the system generally, or the particular seat of the disease. Of the former kind are cold, checking perspiration, certain passions of the mind, and other disorders, as dentition, gout, fever, &c. To the latter belong various acrid ingesta, drastic cathartics, spontaneous acidity, &c. In this complaint each discharge is usually preceded by a murmuring noise, with a sense of weight and uneasiness in the hypogastrium. When it is protracted, the stomach usually becomes affected with sickness, or sometimes vomiting, the countenance grows pale or sallow, and the skin generally dry and rigid. Ultimately great debility and emaciation, with dropsy of the lower extremities, often supervene. Dissections of diarrhœa, where it terminated fatally, have shewn ulcerations of the internal surface of the intestines, sometimes to a considerable extent, especially about the follicular glands; in which occasionally a cancerous character has been observable. The treatment of this complaint must vary greatly according to circumstances: sometimes we can only hope to palliate, as when it occurs in the advanced period of phthisis pulmonalis; sometimes it is rather to be encouraged, relieving more serious symptoms, as a bilious diarrhœa coming on in fever, though still some limits must be put to the discharge. Where, however, we are warranted in using the most speedy means of stopping it, the objects are, 1. To obviate the several causes. 2. To lessen the inordinate action, and give tone to the intestine.

I. Emetics may sometimes be useful, clearing out the stomach, and liver, as well as determining to the skin. Cathartics also, expelling worms, or indurated fæces; but any acrimony in the intestine would probably cause its own discharge, and where there is much irritability, they might aggravate the disease: however, in protracted cases, the alvine contents speedily become vitiated, and renew the irritation; which may be best obviated by an occasional mild aperient, particularly rhubarb. If, however, the liver do not perform its office, the intestine will hardly recover its healthy condition; and that may most probably be effected by the cautious use of mercury. Likewise articles which determine the fluids to other outlets, diuretics, and particularly diaphoretics, in many cases contribute materially to recovery; the latter perhaps assisted by bathing, warm clothing, gentle exercise, &c. Diluent, demulcent, antacid, and other chemical remedies, may be employed to correct acrimony, according to its particular nature. In children teething, the gums should be lanced; and if the bowels have been attacked on the repulsion of some other disease, it may often be proper to endeavour to restore this. But a matter of the greatest importance is the due regulation of the diet, carefully avoiding those articles, which are likely to disagree, or irritate the bowels, and preferring such as have a mild astringent effect. Fish, milk, and vegetables, little acescent, as rice, bread, &c. are best; and for the drink, madeira or brandy, sufficiently diluted rather than malt liquors.

II. Some of the means already noticed will help to fulfil the second indication also, as a wholesome diet, exercise, diaphoretics, &c.: but there are others of more power, which must be resorted to in urgent cases. At the head of these is opium, a full dose of which frequently at once effects a cure; but where there is some more fixed cause, and the complaint of any standing, moderate quantities repeated at proper intervals will answer better, and other subsidiary means ought not to be neglected; aromatics may prevent its disordering the stomach, rhubarb obviate its causing permanent constipation, &c. Tonics are generally proper, the discharge itself inducing debility, and where there is a deficiency of bile particularly, the lighter forms of the aromatic bitters, as the infusum calumbæ, &c. will materially assist; and mild chalybeates are sometimes serviceable. In protracted cases astringents come in aid of the general plan, and where opium disagrees, they may be more necessary: but the milder ones should be employed at first, the more powerful only where the patient appears sinking. Chalk and lime-water answer best where there is acidity; otherwise the pomegranate rind, logwood extract, catechu, kino, tormentil, &c. may be given: where these fail, alum, sulphate of zinc, galls, or superacetate of lead.

DIARTHRO'SIS. (From *διαρθροω*, to articulate.) A moveable connection of bones. This genus has five species, viz. enarthrosis, arthrodia, ginglymus, trochoides, and amphiarthrosis.

Diasapo'nium. (From *δια*, and *σαπων*, soap.) An ointment of soap.

Diasaty'rium. (From *δια*, and *σατυριον*, the orchis.) An ointment of the orchis-root.

Diasci'llium. (From *δια*, and *σκιλλα*, the squill.) Oxymel and vinegar of squills.

Diasci'ncus. (From *δια*, and *σκιγκος*, the crocodile.) A name for the mithridate, in the composition of which there was a part of the crocodile.

Diasco'rdium. (From *δια*, and *σκορδιον*, the water germander.) Electuary of scordium.

Diase'na. (From *δια*, and *sena*.) A medicine in which is senna.

Diasmy'rnum. (From *δια*, and *σμυρνη*, myrrh.) A collyrium containing myrrh.

Diaso'stica. (From *διασωζω*, to preserve.) Medicines which preserve health.

Diaspe'rmatum. (From *δια*, and *σπερμα*, seed.) A medicine composed chiefly of seeds.

Dia'sphage. (From *διασφαζω*, to separate.) *Diasphaxis.* The interstice between two veins.

Diasphy'xis. (From *δια*, and *σφυζω*, to strike.) The pulsation of an artery.

DIA'STASIS. (From *διιστημι*, to separate.) *Diastema.* A separation. A separation of the ends of bones.

Diaste'aton. (From *δια*, and *ϛεαρ*, fat.) An ointment of the fat of animals.

Diaste'ma. See *Diastasis.*

DIA'STOLE. (From *δια*, and *στελλω*,

to stretch.) The dilatation of the heart and arteries.

Diastomo'sis. (From διαϛομοω, to dilate.) Any dilatation, or dilating instrument.

Diastre'mma. (From διαϛρεφω, to turn aside.) *Diastrophe.* A distortion of any limb or part.

Dia'strophe. See *Diastremma.*

Dia'tasis. (From διατεινω, to distend.) The extension of a fractured limb, in order to reduce it.

Diatecoli'thum. (From δια, and τηκολιθος, the Jew's stone.) An antidote containing lapis judaicus.

Diatere'sis. (From δια, and τερεω, to perforate.) A perforation or aperture.

Diatere'tica. (From δια, and τερεω, to preserve.) Medicines which preserve health and prevent disease.

Diate'ssaron. (From δια, and τεσσαρες, four.) A medicine compounded of four simple ingredients.

Diate'ttigum. (From δια, and τεττιξ, a grasshopper.) A medicine in the composition of which were grasshoppers.

DIA'THESIS. (From διατιθημι, to dispose.) Any particular state of the body: thus, in inflammatory fever, there is an inflammatory diathesis, and, during putrid fever, a putrid diathesis.

Diathe'smus. (From διαθεω, to run through.) A rupture through which some fluid escapes.

Diatragaca'nthum. (From δια, and τραγακανθα, tragacanth.) A medicine composed of gum-tragacanth.

Dia'trium. (From δια, and τρεις, three.). A medicine composed of three simple ingredients.

Diaxyla'loes. (From δια, and ξυλαλοη, the lignum aloes.) A medicine in which is lignum aloes.

Diazo'ma. (From διαζωννυμι, to surround; because it surrounds the cavity of the thorax.) The diaphragm.

Diazo'ster, (From διαζωννυμι, to surround; because when the body is girded, the belt usually lies upon it.) A name of the twelfth vertebra of the back.

Dicente'tum. (From δια, and κεντεω, to stimulate.) A pungent stimulating collyrium.

Dichaste'res. (From διχαζω, to divide, because they divide the food.) A name of the foreteeth.

Dichophy'ia. (From διχα, double, and φυω, to grow.) A distemper of the hairs, in which they split and grow forked.

DICROTIC. (*Dicroticus,* sc. *pulsus;* from δις, twice, and κρουω, to strike.) A term given to a pulse in which the artery rebounds after striking, so as to convey the sensation of a double pulsation.

Dictamni'tes. (From δικταμνος, dittany.) A wine medicated with dittany.

DICTA'MNUS. (From *Dictamnus,* a city in Crete, on whose mountains it grows.) The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.* Dittany.

Dicta'mnus a'lbus. White fraxinella, or bastard dittany. *Fraxinella. Dictamnus albus; foliis pinnatis, caule simplici,* of Linnæus. The root of this plant is the part directed for medicinal use; when fresh, it has a moderately strong, not disagreeable smell. Formerly it was much used as a stomachic, tonic, and alexipharmic, and was supposed to be a medicine of much efficacy in removing uterine obstructions and destroying worms; but its medicinal powers became so little regarded by modern physicians, that it had fallen almost entirely into disuse, till Baron Stoerck brought it into notice, by publishing several cases of its success, viz. in tertian intermittents, worms (lumbrici), and menstrual suppressions. In all these cases, he employed the powdered root to the extent of a scruple twice a-day. He also made use of a tincture, prepared of two ounces of the fresh root digested in 14 ounces of spirit of wine; of this 20 to 50 drops two or three times a-day, were successfully employed in epilepsies, and, when joined with steel, this root, we are told, was of great service to chlorotic patients. The dictamnus undoubtedly, says Dr. Woodville, is a medicine of considerable power; but notwithstanding the account of it given by Stoerck, who seems to have paid little attention to its modus operandi, we may still say with Haller "*nondum autem vires pro dignitate exploratus est,*" and it is now fallen into disuse.

Dicta'mnus cre'ticus. See *Origanum dictamnus.*

Didymæ'a. (From διδυμος, double.) A cataplasm; so called by Galen, from the double use to which he put it.

Di'dymi. (From διδυμος, double.) Twins. An old name of the testicles, and two eminences of the brain, from their double protuberance.

Diecbo'lium. (From δια, and εκϐαλλω, to cast out.) A medicine causing an abortion.

Diele'ctron. (From δια, and ελεκτρον, amber.) A name of a troche, in which amber is an ingredient.

DIEMERBROECK, Isbrand, was born near Utrecht, in 1609. After graduating at Angers, he went to Nimeguen in 1636, and for some years continued freely attending those, who were ill of the plague, which raged with great violence, and of which he subsequently published an account. This obtained him much credit: and in 1642 he was made professor extraordinary in medicine at Utrecht; when he gave lectures on that subject, as well as on anatomy, which rendered him very popular. He received also other distinctions at that university, and continued in high esteem till his death in 1674. He was author besides of a system of anatomy, and several other works in medicine and surgery; part of which were published after his death by his son, especially his treatise on the measles and small-pox.

Dierví'lla. (Named in honour of Mr. Dierville, who first brought it from Arcadia.) See *Lonicera diervilla*.

DIET. *Diæta*. The dietetic part of medicine is no inconsiderable branch, and seems to require a much greater share of regard than it commonly meets with. A great variety of diseases might be removed by the observance of a proper diet and regimen, without the assistance of medicine, were it not for the impatience of the sufferers. However, it may on all occasions come in as a proper assistant to the cure, which sometimes cannot be performed without a due observance of the non-naturals. That food is, in general, thought the best and most conducive to long life, which is most simple, pure, and free from irritating qualities, and such as approaches nearest to the nature of our own bodies in a healthy state, or is capable of being easiest converted into their substance by the vis vitæ, after it has been duly prepared by the art of cookery; but the nature, composition, virtues, and uses of particular aliments can never be learnt to satisfaction, without the assistance of practical chemistry.

DIET DRINK. An alterative decoction employed daily in considerable quantities, at least from a pint to a quart. The decoction of sarsaparilla and mezereon, the Lisbon diet drink, is the most common and most useful.

DIETE'TICS. That part of medicine which considers the way of living with relation to food, or diet, suitable to any particular case.

Die'xodos. (From δια, and εξοδος, a way to pass out.) *Diodos*. In Hippocrates it means evacuation by stool.

Diffla'tio. (From *difflo*, to blow away.) Perspiration.

DIGA'STRICUS. (*Digastricus*, sc. *musc.* from δις, twice, and γαστηρ, a belly.) *Biventer maxillæ* of Albinus. *Mastoido-hygenien* of Dumas. A muscle so called from its having two bellies, situated externally between the lower jaw and *os hyoides*. It arises, by a fleshy belly, from the upper part of the processus mastoideus, and descending, it contracts into a round tendon, which passes through the stylohyoideus, and an annular ligament which is fastened to the os hyoides: then it grows fleshy again, and ascends towards the middle of the edge of the lower jaw, where it is inserted. Its use is to open the mouth by pulling the lower jaw downwards and backwards; and when the jaws are shut, to raise the larynx, and consequently the pharynx, upwards, as in deglutition.

Digere'ntia. (From *digero*, to digest.) Medicines which promote the secretion of proper pus in wounds and ulcers.

DIGESTION. (*Digestio*, from *digero*, to dissolve.)

1. An operation in which such matters as are intended to act slowly on each other, are exposed to a slow heat, continued for some time.

2. The change that the food undergoes in the stomach, by which it is converted into chyme. The circumstances necessary to effect a healthy digestion of the food are, 1. A certain degree of heat of the stomach. 2. A free mixture of saliva with the food in the mouth. 3. A certain quantity of healthy gastric juice. 4. The natural peristaltic motion of the stomach. 5. The pressure of the contraction and relaxation of the abdominal muscles and diaphragm. From these circumstances, the particles of the food are softened, dissolved, diluted, and intimately mixed into a soft pap, called chyme, which passes through the pylorus of the stomach into the duodenum. The fluid, which is termed gastric juice, is separated by the minute arteries opening into the cavity of the stomach. See *Gastric Juice*. From various experiments of physiologists, it is ascertained that the gastric juice reduces the aliments into an uniform pap or paste, even out of the body; that it acts in the same manner after death; and that it is the chief agent in the process of digestion.

Animals only are invested with organs of digestion; every one, from man to the polypus, presents an alimentary canal differently formed; the existence of a digestive apparatus, then, could be given as an essential character of animal life. In man, this consists of a long canal extending from the mouth to the anus, into which open the excretory ducts of various glands, situated in the vicinity, that secrete liquors, necessary to alter, liquefy, and animalise alimentary matter.

It would be useless to recapitulate the hypotheses formed to explain digestion; they may be reduced to *coction*, *fermentation*, *trituration*, *putrefaction*, and *maceration* of the food received into the cavity of the stomach. Physiologists are generally agreed, at present, in considering digestion in the stomach as a solution of the aliment by the gastric juice. This liquid, copiously poured on the internal surface of the stomach, when this viscus is irritated by the presence of food, is the production of arterial exhalation; it is neither an acid nor alkali, and seems to be of a nature nearly analogous to saliva; the gastric juice possessing great solvent properties, penetrates into the alimentary matter on all sides, separates and divides its particles, combines with it, changes its composition, and impresses qualities very different from thos it possessed before this mixture. In fact, if a mouthful of wine or food be returned from the stomach some minutes after it has been received, the odour, taste, and all the qualities, both physical and chemical, of these substances, are so altered, that we can with difficulty distinguish them; and vinous liquors, more or less acid, are no longer susceptible of spirituous fermentation. The energy of the power of the gastric juice, perhaps exaggerated by some physiologists, is sufficient to reduce to a soft mass the hardest bones, on which certain animals subsist: it is very probable that its chemical composition is different and variable, and that it is acid, alkaline, or saponaceous, according to the nature of the aliment. Although gastric juice is the most powerful agent of digestion in the stomach, its dissolvent power has need of assistance from the action of several secondary causes, as heat, which seems to augment and concentrate itself in the epigastric region. So long as the exertion of the stomach continues, there is a sort of intestine fermentation, which should not however be, in the full sense, compared to the motion by which fermentative and putrescent substances are decomposed; there is also a moderate and peristaltic motion of the muscular fibres of the stomach which press the aliment on all sides, and perform a slight trituration, while the gastric moisture softens and macerates the food before it is dissolved; it may then be affirmed that the process of digestion is at the same time chemical, vital, and mechanical; the authors, therefore, of various theories to explain this function, have erred by attributing to one cause only, as heat, fermentation, putrefaction, trituration, maceration, and the gastric juice, that which is the aggregate result of all those causes united.

The aliment remains a greater or less time in the stomach, agreeably to the facility or difficulty of the necessary changes taking place. Gosse, of Geneva, has proved on himself, that the animal and vegetable fibre, the white of an egg boiled, white and tendinous parts, paste kneaded with butter, sebaceous substances, and those things which are not fermented, or very little fementative, make greater resistance to the gastric juice, than the gelantinous parts of vegetables and animals, fermented bread, &c. that the latter class of substances require only an hour for their complete dissolution, while the digestion of the former was not completed at the end of several hours.

During the time of digestion, both orifices of the stomach are closed; no gas, disengaged from the aliment, ascends through the œsophagus, unless in cases of bad digestion: slight chills are felt; the pulse becomes quicker and stronger, and the powers of life seem diminished in some organs, to be carried to the seat of the digestive process. The parietes of the stomach soon begin to act: their circular fibres contract in different parts of its extent; these peristaltic oscillations, at first vague and uncertain, become more regular, and are directed from above downwards, from left to right, that is, from the cardia towards the pylorus; its longitudinal fibres also contract, and thus approximate both terminations. In these different motions, the stomach becomes parallel with the pylorus, and the angle formed by the duodenum is almost totally obliterated, which renders the passage of food easier. It has been remarked, that digestion proceeds better during sleep, when we lie on the right side than on the left, and this difference has been attributed to the compression made by the liver on the stomach. It should rather be considered, that on the right side, the passage of food is accelerated by its own gravity, the situation of the stomach is naturally oblique, from left to right, and becomes more so in consequence of changes induced by food.

The aperture of the pylorus is furnished with a muscular ring, covered by a duplicature of mucous membrane; this kind of sphincter keeps it closed during the time of digestion in the stomach, and does not give passage to the aliment until it has undergone a very material alteration. The pylorus, possessing a peculiar and extremely delicate sensibility, may be considered as a sort of vigilant centinel, that prevents any thing from passing that has not suffered proper changes. Many authors quoted by Haller, have been well aware that the food did not pass from the stomach successively in the same manner as it was received, but agreeably to its greater or less facility of digestion.

It would appear that there is a real selection of food in the stomach, for those aliments that admit of an easy digestion are directed towards the pylorus, which gives passage to them: while, on the contrary, such as are not sufficiently digested are not permitted to pass, but kept back in the stomach. This delicate feeling, which we attribute to the pylorus, this exquisite sense, by which it exerts a kind of choice on the food that passes through, may be perhaps objected to; pieces of money, however, or other extraneous indigestible bodies, remain a longer or shorter time in the stomach before they go into the intestines, and present themselves several different times at the orifice of the pylorus, and do not get through till after it has been accustomed to their contact. It is the same with the gastric system as with a secreting gland; and in the same manner the commencement of excretory ducts, possessed of a sort of *elective* sensibility, do not receive the secreted liquor before it has undergone necessary preparations in the glandular parenchyma; so the pylorus, which may be considered the excretory duct of the stomach, does not admit the food nor suffer it to pass into the intestines, until it has been sufficiently elaborated by the action of this organ.

In proportion as the stomach becomes empty, the spasm of the skin ceases, a moderate heat succeeds the shiverings, the pulse becomes more evident and elevated, the quantity of insensible perspiration increases; digestion then produces a general motion, analogous to a feverish paroxysm; and this digestive fever, described also by the antients, is most easy to be observed in women of great sensibility. Nothing positive can be established on the duration of digestion in the stomach. The aliments go out of the stomach with more or less celerity, in proportion as they offer a greater or less resistance to those powers which serve to dissolve them, and agreeably to the energy and strength of the stomach and activity of the gastric juice; five hours, however, may be considered the ordinary time of their presence.

The action of the parietes of the stomach ceases when this viscus is entirely liberated from the aliments that were in its cavity, but not before; the gastric juice, the secretion of which is not augmented by any stimulus, is no longer poured out by its arteries; and the parietes, which come into contact with each other, are only lubricated by the mucus copiously secreted by its internal coat.

DIGESTIVES. (*Digestiva*, sc. *medicamenta;* from *digero*, to dissolve.) A term applied by surgeons to those substances which, when applied to an ulcer or wound, promote suppuration: such are the *ceratum resinæ flavæ*, *unguentum elemi*, warm poultices, fomentations, &c.

Digesti′vum sal sy′lvii. See *Potassæ Murias.*

DIGITA′LIS. (From *digitus*, a finger; because its flower represents a finger.) 1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Angiospermia*. Fox-glove.

2. The pharmacopœial name of the common fox-glove. See *Digitalis purpurea.*

Digita′lis purpurea. The systematic name of the fox-glove; — *Digitalis calycinis foliolis ovatis acutis, corollis obtusis, labio superiore integro*, of Linnæus. The leaves of this plant have a bitter nauseous taste, but no remarkable smell; they have been long used externally to ulcers and scrophulous tumours with considerable advantage. When properly dried, their colour is a lively green. They ought to be collected when the plant begins to blossom, to be dried quickly before the fire, and preserved unpowdered.

Of all the narcotics, digitalis is that which diminishes most powerfully the actions of the system; and it does so without occasioning any previous excitement. Even in the most moderate dose, it diminishes the force and frequency of the pulse, and, in a large dose, reduces it to a great extent, as from 70 beats to 40 or 35 in a minute, occasioning, at the same time, vertigo, indistinct vision, violent and durable sickness, with vomiting. In a still larger quantity, it induces convulsions, coldness of the body, and insensibility; symptoms which have sometimes terminated fatally. As a narcotic, fox-glove has been recommended in epilepsy, insanity, and in some acute inflammatory diseases. Lately it has been very extensively employed in phthisis, and the beneficial effects which it produces in that disease, are probably owing to its narcotic power, by which it reduces the force of the circulation through the lungs and general system. It is administered so as to produce this effect. One grain of the powdered leaves, or ten drops of the saturated tincture, may be given night and morning. This dose is increased one half every second day, till its action on the system becomes apparent. As soon as the pulse begins to be diminished, the increase of dose must be made with more caution; and, whenever nausea is induced, it ought rather to be reduced, or, if necessary, intermitted for a short time. If the sickness become urgent, it is best relieved by stimulants, particularly large doses of brandy, with aromatics. The tincture has been supposed to be the best form of administering digitalis, when the remedy is designed to act as a narcotic: it is also more manageable in its dose, and more uniform in its strength, than the dried leaves.

Besides its narcotic effects, digitalis acts as one of the most certain diuretics in dropsy, apparently from its power of promoting absorption. It has frequently succeeded where the other diuretics have failed. Dr. Withering has an undoubted claim to this discovery; and the numerous cases of dropsy related by him, and other practitioners of established reputation, afford incontestible evidence of its diuretic powers, and of its practical importance in the cure of those disorders. From Dr. Withering's extensive experience of the use of the digitalis in dropsies, he has been able to judge of its success by the following circumstances: — "It seldom succeeds in men of great natural strength, of tense fibre, of warm skin, of florid complexion, or in those with a tight and cordy pulse. If the belly in ascites be tense, hard, and circumscribed, or the limbs in anasarca solid and resisting, we have but little hope. On the contrary, if the pulse be feeble, or intermitting, the countenance pale, the lips livid, the skin cold, the swollen belly soft and fluctuating, the anasarcous limbs readily pitting under the pressure of the finger, we may expect the diuretic effects to follow in a kindly manner." Of the inferences which he deduces, the fourth is, "that if it (digitalis) fails, there is but little chance of any other medicine succeeding." Although the digitalis is now generally admitted to be a very powerful diuretic, yet it is but justice to acknowledge that this medicine has more frequently failed than could have been reasonably expected from a comparison of the facts stated by Dr. Withering. The dose of the dried leaves in powder, is from one to three grains twice a day. But if a liquid medicine be preferred, a drachm of the dried leaves is to be infused for four hours, in half a pint of boiling water, adding to the strained liquor an ounce of any spirituous water. One ounce of this infusion, given twice a day, is a medium dose. It is to be continued in these doses till it either acts upon the kidneys, the stomach, the pulse, (which, as has been said, it has a remarkable power of lowering,) or the bowels.

The administration of this remedy requires to be conducted with much caution. Its effects do not immediately appear; and when the doses are too frequent, or too quickly augmented, its action is concentrated so as to produce frequently the most violent symptoms. The general rules are, to begin with a small dose, to increase it gradually, till the action is apparent on the kidneys, stomach, intestines, or vascular system; and immediately suspending its exhibition, when its effects on any of these parts take place.

The symptoms arising from too large a dose of digitalis are, extreme sickness, vertigo, indistinct vision, incessant vomiting, and a great reduction of the force of the circulation, terminating sometimes in syncope, or convulsions. They are relieved by frequent and small doses of opium, brandy, aromatics, and strong bitters, and by a blister applied to the region of the stomach.

Digi'tium. (From *digitus*, a finger.) A contraction of the finger-joint. A paronychia, or whitlow, or other sore, upon the finger.

DI'GITUS. (From *digero*, to direct.) A finger.

Di'gitus ma'nus. A finger. The *fingers* and thumb in each hand consist of fourteen bones, there being three to each *finger*, and two to the thumb; they are a little convex and round towards the back of the hand, but hollow and plain towards the palm, except the last, where the nails are. The order of their disposition is called first, second, and third *phalanx*. The first is longer than the second, and the second longer than the third. What has been said of the fingers, applies to the toes also.

Di'gitus pe'dis. A toe. See *Digitus manus*.

Diglo'ssum. (From δις, double, and γλωσσα, a tongue; so called because above its leaf there grows a lesser leaf, like two tongues.) The laurus Alexandrina. Galen speaks of a man born with two tongues.

Digno'tio. (From *dignosco*, to distinguish.) See *Diagnosis*.

Dihæ'maton. (From δια, and αιμα, blood.) An antidote in which is the blood of many animals.

Diha'lon. (From δια, and αλς, salt.) A plaster prepared with salt and nitre, adapted to foul ulcers.

Dii'petes. (From Ζευς, διος, Heaven, and ϖιπτω, to fall: *i. e.* falling as rain.) An epithet applied by Hippocrates to semen, when it is discharged like a sudden shower of rain.

Dilata'tio. (From *dilato*, to enlarge.) Dilatation, or enlargement. Diastole.

DILA'TOR. (From *dilato*, to enlarge.) The name of some muscles whose office is to open and enlarge parts.

Dilato'res ala'rum na'si. See *Levator labii superioris*.

Dilato'rium. (From *dilato*, to enlarge.) A surgical instrument for enlarging any part. A speculum oris.

Dill. See *Anethum*.

DILUENTS. (*Diluentia*, sc. *medicamenta*; from *diluo*, to wash away.) Those substances which increase the proportion of fluid in the blood. It is evident that this must be done by watery liquors. Water is, indeed, properly speaking, the only diluent. Various additions are made to it, to render it pleasant, and frequently to give it a slightly demulcent quality. But these are not sufficiently important to require to be noticed, or to be classed as medicines.

Diluents are merely secondary remedies. They are given in acute inflammatory diseases, to lessen the stimulant quality of the blood. They are used to promote the action of diuretics in dropsy, and to favour the operation of sweating.

Di'nica. (From δινος, giddiness.) Medicines which relieve a giddiness.

Di'nos. (From δινεω, to turn round.) A vertigo, or giddiness.

Dio'cres. The name of a lozenge.

Di'odos. (From δια, and οδος, the way through.) Evacuation by stool.

Diœna'nthes. (From δια, and οινανθη, the flower of the vine.) A remedy said to be good for cholera, in which was the flower of the vine-tree.

Dio'gmus. (From διωκω, to persecute.) A distressing palpitation of the heart.

DIONIS, Peter, was born about the middle of the 17th century, and educated to the practice of surgery. He was appointed to read the lectures in anatomy, &c. in the royal gardens at Paris, instituted by Lewis XIV., and after this, surgeon to the queen, and other branches of the royal family, which offices he held, with great credit, to his death in 1718. His first publication gave an account of a woman who died in the sixth month of pregnancy, of what he considered to be a ruptured uterus: but as he states that there were two uteri, it is suspected that the ruptured part was one of the fallopian tubes much enlarged. He afterwards gave a useful epitome of anatomy, which was very favourably received, passed through several editions, and was even translated into the Tartar language, by order of the Emperor of China. His next work, a course of surgical operations, obtained still more celebrity, which it even now in some degree retains, especially as commented upon by Heister. Besides these, a dissertation on sudden death, and a treatise on midwifery, were published by this author.

Dionysi'scus. (From *Διονυσος*, Bacchus, who was of old represented as having horns.) Certain bony excrescences, near the temples, were called dionysisci.

Dionysony'mphas. (From *Διονύσος*, Bacchus, and *νυμφα*, a nymph.) A herb which, if bruised, smells of wine, and yet resists drunkenness.

Diopo'rum. (From *δια*, and *οπωρα*, autumnal fruits.) A medicine composed of ripe fruits for quincy.

Dio'ptra. (From *διοπτομαι*, to see through.) *Dioptron*. Speculum ani, oris, or uteri. Also the lapis specularis.

Dio'ptrica. (From *διοπτομαι*, to see through.) Dioptrics, or doctrine of the refraction of light.

Dioptri'smus. (From *διοπτομαι*, to see through.) Dilatation of any natural passage.

Dio'robum. (From *δια*, and *οροβος*, a vetch.) A medicine, in the composition of which there are vetches.

Diorrho'sis. (From *δια*, and *ορρος*, the serum.) *Diorosis*. A dissolved state of the blood. A conversion of the humours into serum and water.

Diorthro'sis. (From *διορθροω*, to direct.) The reduction of a fracture.

DIOSCO'REA. (Named in honour of Dioscorides.)

1. The name of a genus of plants in the Linnæan system. Class, *Diœcia*. Order, *Hexandria*.

2. An esculent root, called the yam, is obtained principally from three species of *Dioscorea*, the *alata*, *bulbifera*, and *sativa*. They grow spontaneously in both Indies, and their roots are promiscuously eaten as the potatoe is with us. There is great variety in the colour, size, and shape of yams; some are generally blue or brown, round or oblong, and weigh from one pound to two. They are esteemed when dressed as being nutritious and easy of digestion, and are preferred to wheaten bread. Their taste is somewhat like the potatoe, but more luscious. The negroes, whose common food is yams, boil and mash them. They are also ground into flour, and made into bread and puddings.

When they are to be kept for some time, they are exposed upon the ground to the sun, as we do onions, and when sufficiently withered, they are put into dry sand in casks, and placed in a dry garret, where they remain often for many seasons without losing any of their primitive goodness.

Diosco'rea ala'ta. See *Dioscorea*.

Diosco'rea bulbi'fera. See *Dioscorea*.

Diosco'rea sati'va. See *Dioscorea*.

DIOSCO'RIDES, Pedacius, or Pedanius, a celebrated Greek physician and botanist of Anazarba, in Cilicia, now Caramania, who is supposed to have lived in the time of Nero. He is said to have been originally a soldier, but soon became eminent as a physician, and travelled much to improve his knowledge. He paid particular attention to the materia medica, and especially to botany, as subservient to medicine. He profited much by the writings of Theophrastus, who appears to have been a more philosophical botanist. Dioscorides has left a treatise on the materia medica, in five books, chiefly considering plants; also two books on the composition and application of medicines, an essay on antidotes, and another on venomous animals. His works have been often printed in modern times, and commented upon, especially by Matthiolus. He notices about 600 plants, but his descriptions are often so slight and superficial, as to leave their identity a matter of conjecture; which is perhaps of no very great medical importance; though their virtues being generally handed down from the Greeks, it might be useful to ascertain which particular plants they meant.

Dioscu'ri. (*i. e.* *Διος*, *Κουροι*, the sons of Jupiter, or Castor and Pollux.) The parotids were so named from their twin-like equality in shape and position.

Diospy'ros lo'tus. *Indian date plum*. The fruit, when ripe, has an agreeable taste, and is very nutritious.

Dioxelæ'um. (From *δια*, *οξυς*, acid, and *ελαιον*, oil.) A medicine composed of oil and vinegar.

Dio'xos. (From *δια*, and *οξυς*, acid.) A collyrium composed chiefly of vinegar.

Diplasia'smus. (From *διπλοω*, to double.) The re-exacerbation of a disease.

DI'PLOE. (From *διπλοω*, to double.) *Meditullium*. The spongy substance between the two tables of the skull.

DIPLO'PIA. (From *διπλοος*, double, and *οπτομαι*, to see.) *Visus duplicatus*. A disease of the eye, in which the person sees an object double or triple. Dr. Cullen makes it a variety of the second species of pseudoblepsis, which he calls mutans, in which objects appear changed from what they really are: and the disease varies according to the variety of the remote cause.

Di'pnous. (From *δις*, twice, and *πνεω*, to breathe.) An epithet for wounds which are perforated quite through, and admit the air at both ends.

DI'PSACUS. (From *διψα*, thirst.) *Dipsacum*.

1. The name of a genus of plants in the Linnæan system, so called from the concave situation of its leaves, which hold water, by which the thirst of the traveller may be relieved. Class, *Syngenesia*. Order, *Polygamia*. The teasel.

2. A diabetes, from the continual thirst attending it.

Dipyre′num. (From δις, twice, and πυρην, a berry.) A berry, or kernel; a probe with two buttons.

Dipyri′tes. (From δις, twice, and πυρ, fire.) *Dipyros*. An epithet given by Hippocrates to bread twice baked, and which he recommended in dropsies.

DIRE′CTOR. (From *dirigo*, to direct.) A hollow instrument for guiding an incisor-knife; also the name of a muscle which lifts up the penis.

Directo′res pe′nis. (From *dirigo*, to direct.) The same as erectores penis.

Diri′nga. A name, in the isle of Java, for the calamus aromaticus.

Disce′ssus. (From *discedo*, to depart.) The separation of any two bodies, before united, by chemical operation.

Discifo′rmis. (From *discus*, a quoit, and *forma*, likeness.) Resembling a disk, or quoit, in shape. It is applied to the knee-pan.

Discoi′des. (From δισκος, a quoit.) Resembling a disk, or quoit, in shape. It is applied to the chrystalline humour of the eye.

Discri′men. A small roller. A term applied to the diaphragm.

DISCU′TIENTS. (*Discutientia*, sc. *medicamenta*; from *discutio*, to shake in pieces.) *Discusoria*. *Diachytica*. A term in surgery applied to those substances which possess a power of repelling or resolving tumours.

DISEASE. *Morbus*. Any alteration from a perfect state of health is a disease. A disease is variously termed: when it pervades the whole system, as an inflammatory fever, it is called a *general disease*, to distinguish it from inflammation of the eye, or any other viscus, which is a *partial* or *local* one: and when it does not depend on another disease, it is termed an *idiopathic disease*, (which may be either general or partial,) to distinguish it from a *symptomatic affection*, which depends upon another disease, and is produced by consent of parts. See also *Endemic*, *Epidemic*, *Sporadic*, &c.

DISLOCA′TION. (From *disloco*, to put out of place.) Luxation. The secession of a bone of a moveable articulation from its natural cavity.

DISPE′NSARY. (*Dispensarium*, from *dispendo*, to distribute.) The shop, or place, in which medicines are prepared. Also the name of an institution, in which the poor are supplied with medicines and advice.

DISPE′NSATORY. (*Dispensatorium*; from *dispendo*, to distribute.) *Antidotarium*. A book which treats of the composition of medicines.

DISSE′CTION. (From *disseco*, to cut asunder.) The cutting to pieces of any part of an animal, or vegetable, for the purpose of examining its structure.

Disse′ptum. (From *dissepio*, to inclose round.) The diaphragm, or membrane, which divides the cavity of the thorax from the abdomen.

Dissolve′ntia. (From *dissolvo*, to loosen.) Medicines which loosen and dissolve morbid concretions in the body. In chemistry, it means menstrua.

Dissolu′tus. (From *dissolvo*, to loosen.) Loose. An epithet applied to the dysentery, or morbus dissolutus.

Diste′ntio. (From *distendo*, to stretch out.) Distention, or dilatation. A convulsion.

Disti′chia. See *Distichiasis*.

DISTICHI′ASIS. (From διστιχια: from δις, double, and ϛιχος, a row.) *Districhiasis*. *Distichia*. A disease of the eyelash, in which there is a double row of hairs, the one row growing outwards, the other inwards towards the eye.

DISTILLA′TION. (From *distillo*, to drop little by little.) *Alsacta*. *Catastagmos*. A chemical process, very similar to evaporation, instituted to separate the volatile from the fixed principles, by means of heat. Distillatory vessels are either alembics or retorts; the former consist of an inferior vessel, called a cucurbit, designed to contain the matter to be examined, and having an upper part fixed to it, called the capital, or head. In this last, the vapours are condensed by the contact of the surrounding air, or, in other cases, by the assistance of cold water surrounding the head, and contained in a vessel called the refrigeratory. From the lower part of the capital proceeds a tube, called the nose, beak, or spout, through which the vapours, after condensation, are, by a proper figure of the capital, made to flow into a vessel called the receiver, which is usually spherical. These receivers have different names, according to their figure, being called mattrasses, balloons, &c. Retorts are a kind of bottle of glass, pottery, or metal, the bottom being spherical, and the upper part gradually diminishing into a neck, which is turned on one side.

DISTO′RTION. (From *distorqueo*, to wrest aside.) *Distortio*. A term applied to the eyes, when a person seems to turn them from the object he would look at, and is then called squinting, or strabismus. It also signifies the bending of a bone preternaturally to one side; as distortion of the spine, or vertebræ.

Disto′rtor. (From *distorqueo*, to wrest aside.) A muscle, whose office is to draw the mouth awry.

Disto′rtor o′ris. (From *distorqueo*, to wrest aside.) The zygomaticus minor.

Districhi′asis. See *Distichiasis.*

Di′strix. (From δις, double, and θριξ, the hair.) A disease of the hair, when it splits and divides at the end.

Dittander. See *Lepidium sativum.*

Dittany, bastard. See *Dictamnus albus.*

Dittany of Crete. See *Origanum dictamnus.*

Dittany, white. See *Dictamnus albus.*

DIURE′SIS. (From δια, through, and ουρεω, to make water.) An increased secretion of urine. It is also applied to a diabetes.

DIURETICS. (*Diuretica,* sc. *medicamenta,* διουρητικα: from διουρησις, a discharge of urine.) Those medicines or substances are so called which, when taken internally, augment the flow of urine from the kidneys. It is obvious that such an effect will be produced by any substance capable of stimulating the secreting vessels of the kidneys. All the saline diuretics seem to act in this manner. They are received into the circulation; and, passing off with the urine, stimulate the vessels, and increase the quantity secreted.

There are other diuretics, the effect of which appears not to arise from direct application, but from an action excited in the stomach, and propagated by nervous communication to the secreting urinary vessels.

The diuretic operation of squill, and several other vegetables, appears to be of this kind.

There is still, perhaps, another mode in which certain substances produce a diuretic effect; that is, by promoting absorption. When a large quantity of watery fluid is introduced into the circulating mass, it stimulates the secreting vessels of the kidneys, and is carried off by urine. If, therefore, absorption be promoted, and if a portion of serous fluid, perhaps previously effused, be taken up, the quantity of fluid secreted by the kidneys will be increased. In this way digitalis seems to act: its diuretic effect, it has been said, is greater when exhibited in dropsy than it is in health.

On the same principle, (the effect arising from stimulating the absorbent system,) may probably be explained the utility of mercury in promoting the action of several diuretics.

The action of these remedies is promoted by drinking freely of mild diluents. It is also influenced by the state of the surface of the body. If external heat be applied, diuresis is frequently prevented, and diaphoresis produced. Hence the doses of them should be given in the course of the day, and the patient, if possible, be kept out of bed.

The direct effects of diuretics are sufficiently evident. They discharge the watery part of the blood; and, by that discharge, they indirectly promote absorption over the whole system.

Dropsy is the disease in which they are principally employed; and when they can be brought to act, the disease is removed with less injury to the patient than it can be by exciting any other evacuation. Their success is very precarious, the most powerful often failing; and, as the disease is so frequently connected with organic affection, even the removal of the effused fluid, when it takes place, only palliates without effecting a cure.

Diuretics have been likewise occasionally used in calculous affections, in gonorrhœa, and with a view of diminishing plethora, or checking profuse perspiration.

Murray, in his Elements of Materia Medica, classes the super-tartrate of potash, or cream of tartar, and nitrate of potash, or nitre, the muriate of ammonia, or crude sal ammoniac, potash, and the acetate of potash, or kali acetatum, among the *saline* diuretics; and selects the following from the *vegetable* kingdom: — scilla maritima, digitalis purpurea, nicotiana tabacum, solanum dulcamara, lactuca virosa, colchicum autumnale, gratiola officinalis, spartium scoparium, juniperus communis, copaifera officinalis, pinus balsamea, and pinus larix; and the lytta vesicatoria from the *animal* kingdom.

In speaking of particular diuretics, Dr. Cullen says, the diuretic vegetables mentioned by writers are of very little power, and are employed with very little success. Of the umbellatæ, the medicinal power resides especially in their seeds; but he never found any of them very efficacious. The semen dauci sylvestris has been commended as a diuretic; but its powers as such are not very remarkable. In like manner some of the *plantæ stellatæ* have been commended as diuretics; but none of them deserve our notice, except the *rubia tinctorium,* the root of which passes so much by the kidneys as to give its colour to the urine. Hence it may fairly be supposed to stimulate the secretories; but Dr. Cullen found its diuretic powers did not always appear, and never to any considerable degree; and as, in brute animals, it has always appeared hurtful to the system, he does not think it fit to be employed to any extent in human diseases. The bardana, lithospermum, ononis, asparagus, enula campana, are all substances which seem to pass, in some measure, by the kidneys; but their diuretic powers are hardly worth notice.

The principal articles included by Dr. Cullen, in his catalogue of diuretics, are dulcamara, digitalis, scilla; some of the alliaceæ and siliquosæ; the balsams and resins; cantharides, and the diuretic salts.

Divapora′tio. Evaporation.

Divarication. The crossing of any two things: thus when the muscular or tendinous fibres intersect each other at different angles, they are said to divaricate.

Diverso′rium. (From *diversor,* to resort to.) The receptaculum chyli.

DIVERTI'CULUM. A mal-formation or diseased appearance of a part, in which a portion goes out of the regular course; and thereby forms a diverticulum, or deviation from the usual course. It is generally applied to the alimentary canal.

Diverti'culum nu'ckii. The opening through which the round ligaments of the uterus pass. Nuck asserted that it remained open a long time after birth; to these openings he gave the name of *diverticula*.

Divi'nus. A pompous epithet of many compositions, from their supposed excellence.

Divu'lsio. (From *divello*, to pull asunder.) Urine with a ragged and uneven sediment.

Docimastic art. *Ars docimastica.* The art of examining fossils, in order to discover what metals, &c. they contain.

Dock-cresses. See *Lapsana.*

Dock, sour. See *Rumex acetosa.*

Dock, water. See *Rumex hydrolapathum.*

Dodder of thyme. See *Cuscuta epithymum.*

Dodecada'ctylus. (From δωδεκα, twelve, and δακτυλος, a finger; so named because its length is about the breadth of twelve fingers.) The duodenum, an intestine so called. It must be observed, that at the time this name was given anatomy consisted in the dissection of brutes; and the length was therefore probably adjudged from the gut of some animal, and not of man.

Dodecapha'rmacum. (From δωδεκα, twelve, and φαρμακον, a medicine.) An ointment consisting of twelve ingredients, for which reason it was called the ointment of the twelve apostles.

Dodeca'theon. (From δωδεκα, twelve, and τιθημι, to put.) An antidote consisting of twelve simples.

DODONÆUS, Rembertus, (or Dodoens,) was born at Mechlin in 1517. He became physician to two succeeding emperors, and in 1582 was appointed professor of physic in the newly-founded University of Leyden; the duties of which he performed with credit till his death three years after. His fame at present chiefly rests on his botanical publications, particularly his "Pemptades," or 30 books of the history of plants. The "Frugum Historia," "Herbarium Belgicum," &c. are of much inferior merit.

Dog-rose. See *Rosa canina.*

Dog's bane, Syrian. This plant, *Asclepias Syriaca* of Linnæus, is particularly poisonous to dogs, and also to the human species. Boiling appears to destroy the poison in the young shoots, which are then said to be esculent, and flavoured like asparagus.

Dog's-grass. See *Triticum repens.*

Dog's-mercury. See *Mercurialis perennis.*

Dog-stones. See *Orchis mascula.*

DO'GMA. (From δοκεω, to be of opinion.) An opinion founded on reason and experience.

DO'LICHOS. (From δολιχος, long: so called from its long shape.) 1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

2. The pharmacopœial name of the cowhage. See *Dolichos pruriens.*

Do'lichos so'ja. The plant which affords the soy. It is much cultivated in Japan, where it is called *daidsu:* and where the pods supply their kitchens with various productions; but the two principal are, a sort of butter, termed *miso*, and a pickle called *sooju.*

Do'lichos pru'riens. The systematic name of the cowhage. *Dolichos. Dolichos pruriens; volubilis, leguminibus racemosis, valvulis subcarinatis hirtis, pedunculis ternis,* of Linnæus. The pods of this plant are covered with sharp hairs, which are the parts employed medicinally in form of electuary, as anthelmintics. The manner in which these hairy spicula act, seems to be purely mechanical: for neither the tincture, nor the decoction, possess the least anthelmintic power.

Do'lor facie'i. See *Tic douloureux.*

DORO'NICUM. (From *dorongi*, Arab.) Leopard's bane. See *Arnica.*

Doro'nicum germa'nicum. See *Arnica.*

Doro'nicum pardalia'nches. The systematic name of the Roman leopard's bane. See *Doronicum romanum.*

Doro'nicum roma'num. Roman leopard's bane. *Doronicum pardalianches; foliis cordatis, obtusis, denticulatis; radicalibus petiolatis; caulinis amplexicaulibus,* of Linnæus. The root of this plant, if given in a full dose, possesses poisonous properties; but instances are related of its efficacy in epileptical and other nervous diseases.

DO'RSAL. Belonging to the back.

Dorsa'les ne'rvi. The nerves which pass out from the vertebræ of the back.

Do'rsi spina'lis. See *Spinalis dorsi.*

DORSTE'NIA. (Named in honour of Dr. Dorsten.) The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.*

Dorste'nia contraye'rva. The systematic name of the plant which affords the contrayerva root. *Contrayerva. Drakena. Cyperus longus, odorus, peruanus. Bezoardica radix.*

The contrayerva was first brought into Europe about the year 1581, by Sir Francis Drake, whence its name Drakena. It is the root of a small plant found in Peru, and other parts of the Spanish West Indies. Dr. Houston observes, that the roots of different species of dorstenia are promiscuously gathered and exported for those of the contrayerva, and, as all the species bear a great resemblance to each other, they are generally used for medical purposes in this country. The tuberous parts of these roots are the strongest, and should be chosen for use. They have an agreeable aromatic smell; a rough bitter, penetrating taste; and when chewed, they give out a sweetish kind of acrimony.

It is diaphoretic and antiseptic; formerly used in low nervous fevers, and those of the malignant kind; though taken freely, it does not produce much heat. It is, however, now seldom used, though, with the Peruvian bark in decoction, it is occasionally employed in ulcerated sore throats, as a gargle.

Dr. Cullen observes, that this and serpentaria are powerful stimulants; and both have been employed in fevers in which debility prevailed. However, he thinks, wine may always supersede the stimulant powers of these medicines; and that debility is better remedied by the tonic and antiseptic powers of cold and Peruvian bark, than by any stimulants.

By the assistance of heat, both spirit and water extract all its virtues; but they carry little or nothing in distillation; extracts made by inspissating the decoction, retain all the virtues of the root.

The London College forms the compound powder of contrayerva by combining five ounces of contrayerva root with a pound and a half of prepared shells. This powder was formerly made up in balls, and called *lapis contrayervæ*, employed in the decline of ardent fevers, and through the whole course of low and nervous ones. The radix serpentariæ virginiensis, in all cases, may be substituted for the contrayerva.

Dorste'nia Drake'na. The systematic name for one sort of the contrayerva.

Dorste'nia Housto'nii. See *Dorstenia contrayerva*.

Do'thien. A name for the furunculus.

Dove'ri pu'lvis. See *Pulvis ipecacuanhæ compositus*.

Dove's foot. The geranium columbinum.

DOUGLAS, James, M. D. was born in Scotland in 1675. After completing his education, he came to London, and applied himself diligently to the study of anatomy and surgery, which he both taught and practised several years with success. Haller has spoken very highly of his preparations, to shew the motion of the joints, and the structure of the bones. He patronized the celebrated William Hunter; who assisted him shortly before his death in 1742. He was reader of Anatomy to the Company of Surgeons, and a Fellow of the Royal Society, to which he made several communications. He published, in 1707, a more correct description of the muscles than had before appeared; eight years after, a tolerable account of preceding anatomical writers; in 1726, a History of the lateral Operation for the Stone; and in 1730, a very accurate Description of the Peritoneum, &c.

DOUGLAS, John, brother of the preceding, was surgeon to the Westminster Infirmary, and author of several controversial pieces. In one of them, called "Remarks on a late pompous Work," he censures, with no small degree of severity, Cheselden's Anatomy of the Bones; in another, he criticises, with equal asperity, the works of Chamberlen and Chapman; and in a third, he decries the new forceps of Dr. Smellie. He also wrote a work on the high operation for the stone, which he practised; a Dissertation on the Venereal Disease; and an Account of the Efficacy of Bark in stopping gangrene.

DRA'BA. (From δρασσω, to seize; so called from its sudden effect upon the nose of those who eat it.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia*. Order, *Siliculosa*.

2. A name of the lepidium, or Arabian mustard, and Turkey cresses.

Dra'co sylve'stris. See *Achillea Ptarmica*.

DRACOCE'PHALUM. (From δρακων, a dragon, and κεφαλη, a head.) The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*.

Dracoce'phalum canarie'nse. The systematic name of the balm of Gilead. *Moldavica*. *Melissa Turcica*. Turkey-balsam. Canary balsam. Balsam of Gilead. This plant, *Dracocephalum moldavica; floribus verticellatis, bracteis lanceolatis, serraturis capillaceis* of Linnæus, affords a fragrant essential oil, by distillation, known in Germany by the name of *oleum syriæ*. The whole herb abounds with an aromatic smell, and an agreeable taste, joined with an aromatic flavour; it is recommended to give tone to the stomach and nervous system.

Draco'nis sa'nguis. See *Calamus rotang*.

Draco'ntium. (From δρακων, a dragon; so called because its roots resemble a dragon's tail.) See *Arum dracunculus*.

DRACU'NCULUS. (From δρακων, a serpent.) The Guinea worm; called also vermiculus capillaris. These animalcules are common in both Indies, in most parts of Africa, occasionally at Genoa, and other hot countries. These worms resemble the common worm, but are much larger; commonly found in the legs, but sometimes in the muscular part of the arms. They principally affect children, and their generation is not unlike that of the broad worms of the belly; hence their name tape-worm. While they move under the skin, they create no trouble; but, in length of time, the place near the dracunculus suppurates, and the animal puts forth its head. If it be drawn, it excites considerable uneasiness, especially if drawn so forcibly as to break it; for the part left within creates intolerable pain.

These worms are of different lengths. In the Edin. Med. Essays, mention is made of one that was three yards and a half in length.

Dragaca′ntha. See *Astragalus*.

Dragant gum. See *Astragalus*.

Dragon's blood. See Calamus *rotang*.

Dragon's wort. See *Arum dracunculus*.

DRAKE, James, M.D. Fellow of the College of Physicians, and of the Royal Society, published, in 1707, "A new System of Anatomy;" which, though taken principally from Cowper, being on a reduced plan, and more within the reach of students, was pretty favourably received. In the third edition, it was styled "Anthropologia Nova." In abscesses of the antrum maxillare, he advised drawing one of the molar teeth, to let out the matter. The description of the internal nostrils, and of the cavities entering them, is new; as are also the plates of the abdominal viscera.

Drake′na. See *Dorstenia contrayerva*.

DRA′STICA. (*Drastica*, sc. *medicamenta*, δραστικος, active, brisk; from δραω, to effect.) A term generally applied to those medicines which are very violent in their action; thus, drastic purges, emetics, &c.

DRELINCOURT, Charles, was born at Paris in 1633; and after studying some years at Saumur, he went to graduate at Montpelier. He soon after attended the celebrated Turenne in his campaigns, and was by him made physician to the army. He was also appointed one of the physicians to Lewis XIV. But in 1688 he was chosen to succeed Vander Linden, as professor of medicine at Leyden; and two years after he was advanced to the chair of anatomy. He was also made physician to William, then Prince of Orange, and his consort; and on their accession to the throne of England, he spoke the congratulatory oration to them, as rector of the university. He continued in his professorship, giving general satisfaction to the period of his death in 1697. He was a voluminous and learned, but hardly an original writer; yet his works were very much read at the time. In one of his orations, he exculpates medical men from the charge of impiety, observing that the contemplation of the works of God tends to bind them more to religion. In his "Apologia Medica," he refutes the notion, that physicians were excluded from Rome for six hundred years. He strenuously opposed the introduction of chemical preparations into medicine, which was then very prevalent. His son, *Charles*, succeeded him in practice, but has left no publication, except his thesis "De Lienosis."

Dresde′nsis pu′lvis. An oleo saccharum, containing the oil of cinnamon.

Dro′ma. The name of a plaster described by Myrepsus.

Dropaci′smus. (From δρεπω, to remove.) *Dropax*. A stimulant plaster of pitch, wax, &c. to take off hair.

Dro′pax. See *Dropacismus*.

DRO′PSY. A collection of a serous fluid in the cellular membrane; in the viscera and the circumscribed cavities of the body. See *Hydrops*. *Ascites*, *Anasarca*, *Hydrocephalus*, *Hydrothorax*, *Hydrocele*.

Dropsy of the belly. See *Ascites*.

Dropsy of the brain. See *Hydrocephalus*.

Dropsy of the cellular membrane. See *Anasarca*.

Dropsy of the chest. See *Hydrothorax*.

Dropsy of the ovaria. See *Ascites*.

Dropsy of the testicle. See *Hydrocele*.

Dropwort. See *Œnanthe*, and *Spiræa Filipendula*.

Dropwort hemlock. See *Œnanthe*.

Dropwort water. See *Œnanthe*.

DRO′SERA. (From δροσερα, dewy; which is from δροσος, dew; drops hanging on the leaves like dew.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Hexagynia*. Sundew.

Dro′sera rotundifo′lia. The systematic name of the sun-dew. *Ros solis*. *Rorella*. Sun-dew. This elegant little plant, *Drosera rotundifolia*; *scapis radicatis*; *foliis orbiculatis* of Linnæus, is said to be so acrid as to ulcerate the skin, and remove warts and corns; and to excite a fatal coughing and delirium in sheep who eat it. It is seldom given medicinally in this country but by the lower orders, who esteem a decoction of it as serviceable in asthmas and coughs.

Drosiobo′tanum. (From δροσος, dew, and βοτανη, a herb; so called from its being covered with an aromatic dew.) The herb betony. See *Betonica*.

Drosso′meli. (From δροσος, dew, and μελι, honey.) Honey-dew. Manna.

Dry belly-ach. See *Colica*.

DUCTI′LITY. A property by which bodies are elongated by repeated or continued pressure. It is peculiar to metals.

Ducts, biliary. See *Biliary duct*.

DU′CTUS ARTERIO′SUS. A great inosculation found only in the fœtus, and very young children, betwixt the pulmonary artery and the aorta. In adults it is closed up.

DU′CTUS AD NA′SUM. See *Canalis nasalis*.

Du′ctus au′ris palati′nus. The eustachian tube.

Du′ctus bilia′ris. See *Choledochus ductus*.

DU′CTUS COMMU′NIS CHOLE′DOCHUS. See *Choledochus ductus*.

DU′CTUS HEPA′TICUS. See *Hepatic duct*.

DU′CTUS LACHRYMA′LIS. See *Lachrymal ducts*.

DU′CTUS LACTI′FERI. *Ductus galactophori*. The excretory ducts of the glandular substance composing the female breast. The milk passes along these ducts to the nipple.

DU'CTUS PANCREA'TICUS. The pancreatic duct. It is white and small, and arises from the sharp extremity of the pancreas, runs through the middle of the gland towards the duodenum, into which it pours its contents by an opening common to it and the *ductus communis choledochus*.

DU'CTUS SALIVA'LES. The excretory ducts of the salivary glands, which convey the saliva into the mouth.

DU'CTUS STENO'NIS. The Stenonian duct, which was so called after its discoverer, *Steno*. It arises from all the small excretory ducts of the parotid gland, and passes transversely over the masseter muscle, penetrates the buccinator, and opens into the mouth.

DU'CTUS THORA'CICUS. See *Thoracic duct*.

DU'CTUS VENO'SUS. When the vena cava passes the liver in the fœtus, it sends off the ductus venosus, which communicates with the sinus of the vena portæ; but, in adults, it becomes a flat ligament.

DU'CTUS WARTHONIA'NUS. The excretory duct of the maxillary glands; so named after its discoverer.

Dulca'cidum. (From *dulcis*, sweet, and *acidus*, sour.) An oxymel. A medicine composed of a sweet and sour ingredient.

DULCAMA'RA. (From *dulcis*, sweet, and *amarus*, bitter.) See *Solanum dulcamara*.

DUNCAN, Daniel, was born at Montauban, in Languedoc, in 1649, son of a professor of physic in that city, but of a family originally Scotch. Having lost both his parents in early infancy, he was taken under the protection of his maternal uncle, and at a proper age sent to study medicine at Montpelier, where he took his degree. He afterwards resided seven years at Paris, where he published his first work, upon the principle of motion in animal bodies. He then visited London, partly to arrange some family affairs, partly to obtain information concerning the plague; and intended to have settled there: but after two years he was summoned to attend his patron, the great Colbert. He soon after made public two works, in which he attempted to explain the Animal Functions on Chemical and Mechanical Principles. On the death of Colbert, he resided for some years in his native city, but the persecution of the Protestants in 1690 drove him to Swisserland; and he was appointed professor of Anatomy and Chemistry at Berne, where he got into considerable practice. In 1699 he was sent for to attend the Princess of Hesse-Cassel, who had symptoms of threatening consumption, induced by the excessive use of tea, and other hot liquors: which led him to write a Treatise against that practice, published subsequently by the persuasion of his friend, Boerhaave. He remained there three years, affording meanwhile much relief to the French refugees; and the fame of his liberality procured his invitation to the court of Berlin: but a regard to his health and to economy soon obliged him to remove to the Hague. In 1714 he accomplished his favourite object of settling in London, and when he reached his 70th year, put in practice his previous resolution of giving his professional services only gratuitously; in which he steadily persevered during the remaining sixteen years of his life, though in 1721 he lost the third part of his property by the South-sea scheme.

Dung, devil's. See *Ferula assafœtida*.

Duo. (Δυω, two.) Some compositions consisting of two ingredients, are distinguished by this term, as pilulæ ex duobus.

DUODE'NUM. (From *duodenus*, consisting of twelve; so called because it was supposed not to exceed the breadth of twelve fingers; but as the antients dissected only animals, this does not hold good in the human subject.) The first portion of the small intestines. See *Intestines*.

Duplica'na. (From *duplex*, double.) A name of the double tertian fever.

DU'RA MA'TER. (From *durus*, hard, and *mater*, a mother; called *dura*, from its comparative hardness with the *pia mater*, and *mater*, from its being supposed to be the source of all the other membranes.) *Dura meninx*. *Dermatodes*. A thick and somewhat opaque and insensible membrane, formed of two layers, that surrounds and defends the brain, and adheres strongly to the internal surface of the cranium. It has three considerable processes, the falciform, the tentorium, and the septum cerebelli; and several sinusses, of which the longitudinal, lateral, and inferior longitudinal, are the principal. Upon the external surface of the dura mater, there are little holes, from which emerge fleshy-coloured papillæ, and which, upon examining the skull-cap, will be found to have corresponding foveæ. These are the external glandulæ Pacchioni. They are in number from ten to fifteen on each side, and are chiefly lateral to the course of the longitudinal sinus. The arteries which supply this membrane with vessels for its own nourishment, for that of the contiguous bone, and for the perpetual exudation of the fluid, or halitus rather, which moistens or bedews its internal surface, may be divided into anterior, middle, and posterior. The first proceeds from the ophthalmic and ethmoidal branches; the second from the internal maxillary and superior pharyngeal; the posterior from the occipital and vertebral arteries.

The principal artery of the dura mater, named, by way of distinction, the great artery of the dura mater, is derived from the internal maxillary artery, a branch of the external carotid. It is called the spinalis, or spheno-spinalis, from its passing into the head through the spinous hole of the sphenoid bone, or meninga media, from its relative situation, as it rises in the great middle fossa of the skull. This artery, though it sometimes enters the skull in two branches, usually enters in one considerable branch, and divides, soon after it reaches the dura mater, into three or four branches, of which the anterior is the largest; and these spread their ramifications beautifully upon the dura mater, over all that part which is opposite to the anterior, middle, and posterior lobes of the brain. Its larger trunks run upon the internal surface of the parietal bone, and are sometimes for a considerable space buried in its substance. The extreme branches of this artery extend so as to inosculate with the anterior and posterior arteries of the dura mater; and through the bones, (chiefly parietal and temporal bones,) they inosculate with the temporal and occipital arteries. The meningeal artery has been known to become aneurismal, and distended at intervals; it has formed an aneurism, destroying the bones and causing epilepsy.

Du′ra me′ninx. Before the time of Galen, the term meninx was common to all the membranes of the body; afterwards it was appropriated to those of the brain. See *Dura mater*.

Dwale. See *Atropa belladonna.*

Dwarf, elder. See *Sambucus ebulus.*

Dyo′ta. (From δυω, two, and ους, ωτος, an ear.) A chemical instrument with two ears, or handles.

DYSÆSTHE′SIA. (From δυς, difficulty, and αισθανομαι, to feel or perceive.) Impaired feeling.

DYSÆSTHE′SIÆ. An order in the class, *locales* of Dr. Cullen's Nosology, containing those diseases, in which the senses are depraved, or destroyed, from a defect of the external organs.

Dysanago′gus. (From δυς, with difficulty, and αναγω, to subdue.) Viscid expectoration.

Dyscatapo′tia. (From δυς, and καταπινω, to drink.) A difficulty of swallowing liquids, which Dr. Mead thinks a more proper term than that generally used for canine madness, viz. hydrophobia; as it is more particularly descriptive of the affection under which the unhappy patients labour; for in reality, they dread water from the difficulty of swallowing it.

DYSCINE′SIA. (From δυς, bad, and κινεω, to move.) Bad or imperfect motion.

DYSCINE′SIÆ. An order in the class *locales* of Cullen's nosology; embracing diseases in which the motion is impeded, or depraved, from an imperfection of the organ.

Dyscopho′sis. (From δυς, with difficulty, and κωφοω, to be deaf.) A defect in the sense of hearing.

DYSCRA′SIA. (From δυς, with difficulty, and κεραννυμι, to mix.) A bad habit of body.

DYSECŒ′A. (From δυς, difficulty, and ακοη, hearing.) *Cophosis.* Deafness. Hearing diminished, or destroyed. A genus of disease in the class *locales*, and order *dysæsthesiæ* of Cullen, containing two species: *Dysecœa organica*, which arises from wax in the meatus, injuries of the membrane, or inflammation and obstruction of the tube: *Dysecœa atonica*, when without any discernible injury of the organ.

Dyse′lcia. (From δυς, with difficulty, and ελκος, an ulcer.) An ulcer difficult to heal.

Dyse′metus. (From δυς, with difficulty, and εμεω, to vomit.) A person not easily made to vomit.

Dysente′ria. See *Dysentery.*

DYSENTERY. (From δυς, difficulty, and εντερα, the bowels.) *Dysenteria. Dissolutus morbus. Diarrhœa carnosa.* The flux. A genus of disease in the class *pyrexiæ*, and order *profluvia* of Cullen's nosology. It is known by contagious pyrexia; frequent griping stools; tenesmus; stools, chiefly mucous, sometimes mixed with blood, the natural fæces being retained or voided in small, compact, hard substances, known by the name of scybala; loss of appetite, and nausea. It occurs chiefly in summer and autumn, and is often occasioned by much moisture succeeding quickly intense heat, or great drought; whereby the perspiration is suddenly checked, and a determination made to the intestines. It is likewise occasioned by the use of unwholesome and putrid food, and by noxious exhalations and vapours; hence it appears often in armies encamped in the neighbourhood of low marshy grounds, and proves highly destructive; but the cause which most usually gives rise to it, is a specific contagion; and when it once makes its appearance, where numbers of people are collected together, it not unfrequently spreads with great rapidity. A peculiar disposition in the atmosphere seems often to predispose, or give rise to the dysentery, in which case it prevails epidemically.

It frequently occurs about the same time with autumnal intermittent and remittent fevers, and with these it is often complicated.

The disease, however, is much more prevalent in warm climates than in cold ones; and in the months of August, September, and October, which is the rainy season of the year in the West Indies, it is very apt to break out and to become very general among the negroes on the different plantations in the colonies. The body having been rendered irritable by the great heat of the summer, and being exposed suddenly to much moisture with open pores, the blood is thereby thrown from the exterior vessels upon the interior, so as to give rise to dysenteries.

An attack of dysentery is sometimes preceded by loss of appetite, costiveness, flatulency, sickness at the stomach, and a slight vomiting, and comes on with slight chills, succeeded by heat in the skin, and frequency of the pulse. These symptoms are in general the forerunners of the griping and increased evacuations which afterwards occur.

When the inflammation begins to occupy the lower part of the intestinal tube, the stools become more frequent, and less abundant; and, in passing through the inflamed parts, they occasion great pain, so that every evacuation is preceded by a severe griping, as also a rumbling noise.

The motions vary both in colour and consistence, being sometimes composed of frothy mucus, streaked with blood, and at other times of an acrid watery humour, like the washings of meat, and with a very fetid smell. Sometimes pure blood is voided; now and then lumps of coagulated mucus, resembling bits of cheese, are to be observed in the evacuations, and in some instances a quantity of purulent matter is passed.

Sometimes what is voided consists merely of a mucous matter, without any appearance of blood, exhibiting that disease which is known by the name of dysenteria alba, or morbus mucosus.

Whilst the stools consist of these various matters, and are voided frequently, it is seldom that we can perceive any natural fæces among them, and when we do, they appear in small hard balls, called scybala, which being passed, the patient is sure to experience some temporary relief from the griping and tenesmus.

It frequently happens, from the violent efforts which are made to discharge the irritating matters, that a portion of the gut is forced beyond the verge of the anus, which, in the progress of the disease, proves a troublesome and distressing symptom; as does likewise the tenesmus, there being a constant inclination to go to stool, without the ability of voiding any thing, except perhaps a little mucus.

More or less pyrexia usually attends with the symptoms which have been described, throughout the whole of the disease, where it is inclined to terminate fatally; and is either of an inflammatory or putrid tendency. In other cases, the febrile state wholly disappears after a time, while the proper dysenteric symptoms probably will be of long continuance. Hence the distinction into acute and chronic dysentery.

When the symptoms run high, produce great loss of strength, and are accompanied with a putrid tendency and a fetid and involuntary discharge, the disease often terminates fatally in the course of a few days; but when they are more moderate, it is often protracted to a considerable length of time, and so goes off at last by a gentle perspiration, diffused equally over the whole body; the fever, thirst, and griping then ceasing, and the stools becoming of a natural colour and consistence. When the disease is of long standing, and has become habitual, it seldom admits of an easy cure; and when it attacks a person labouring under an advanced stage of scurvy, or pulmonary consumption, or whose constitution has been much impaired by any other disorder, it is sure to prove fatal. It sometimes appears at the same time with autumnal intermittent and remittent fevers, as has been observed, and is then more complicated and difficult to remove.

Upon opening the bodies of those who die of dysentery, the internal coat of the intestines (but more particularly of the colon and rectum) appears to be affected with inflammation and its consequences, such as ulceration, gangrene, and contractions. The peritonæum and other coverings of the abdomen, seem likewise, in many instances, to be affected by inflammation.

In the treatment of the acute dysentery, when not arising from contagion, but attended by considerable pyrexia and pain, in persons of a strong and full habit, it will be right to commence by a moderate venæsection; but in general leeches to the abdomen will abstract a sufficient quantity of blood, followed by fomentations, or the warm bath, which may produce a powerful determination to the surface as well as counteract spasm; also blisters or rubefacients should not be neglected. With regard to internal remedies, a brisk emetic will often be advisable, particularly where the tongue is very foul, the stomach loaded, or marks of congestion in the liver appear: it may also by inducing diaphoresis materially check the violence of the symptoms, nay sometimes cut short the disease at once. The next object is effectually to clear out the bowels: for which purpose calomel, joined with opium in quantity sufficient to relieve the pain may be given, and followed up by castor oil, neutral salts, &c. till they operate. In the mean time mucilaginous demulcents may help to moderate the irritation. When the bowels have been thoroughly evacuated, it will be important to procure a steady determination to the surface, and the compound powder of ipecacuanha is perhaps the best medicine; assisted by warm clothing, friction, exercise, &c. Should the liver not perform its office properly, the continued use of mercury may be necessary; to restore the strength, and relieve dyspeptic symptoms, tonics and antacids will be useful, with a mild nutritious diet; and great care must be taken to obviate accumulation of fæces. In the chronic form of the disease, demulcents and sedatives may be freely employed by the mouth or in the form of clyster; the bowels may be occasionally relieved by rhubarb, or other mild aperient; mercury should be cautiously employed, where the discharge of bile is indicated, or if that cannot be borne, nitric acid may be tried; and besides great attention to regimen, as in the decline of acute dysentery, mild astringents, with tonics, &c. may contribute materially to the recovery of the patient.

Dysepulo'ticus. (From δυς, with difficulty, and επυλοω, to cicatrize.) *Dysepulotus.* An inveterate ulcer difficult to be healed.

Dyshæmorrho'is. (From δυς, with difficulty, and αιμορροϊς, the piles.) Suppression of bleeding piles.

DYSLO'CHIA. (From δυς, difficultly, and λοχια, the lochia.) A suppression of the lochia.

DYSMENORRHÆ'A. (From δυς, with difficulty, and μηνορροια, the menses.) A difficult or painful menstruation, accompanied with severe pains in the back, loins, and bottom of the belly.

Dyso'des. (From δυς, bad, and οζω, to smell.) A bad smell. Fœtid. Hippocrates applies it to a fœtid disorder of the small intestines. Also the name of a malagma and acopon in Galen and Paulus Ægineta.

DYSO'PIA. (From δυς, bad, and ωψ, an eye.) *Parorasis.* Difficult sight. Sight depraved, requiring one certain quantity of light, one particular distance, or one position. A genus of disease in the class *locales*, and order *dysæsthesiæ* of Cullen, containing the five following species: 1. *Dysopia tenebrarum,* called also *amblyopia crepuscularis,* requiring objects to be placed in a strong light. 2. *Dysopia luminis,* likewise termed *amblyopia meridiana,* objects only discernible in a weak light. 3. *Dysopia dissitorum,* in which distant objects are not perceived. 4. *Dysopia proximorum,* or *dysopia amblyopia,* in which objects too near are not perceived. 5. *Dysopia lateralis,* called also *amblyopia luscorum,* in which objects are not seen, unless placed in an oblique position.

DYSORE'XIA. (From δυς, bad, and ορεξις, appetite.) A bad or depraved appetite.

DYSORE'XIÆ. The name of an order in the class *locales* of Cullen's nosology, which he divides into two sections, appetitus erronei and deficientes.

DYSPE'PSIA. (From δυς, bad, and ϖεπτω, to concoct.) *Apepsia.* Indigestion. Dr. Cullen arranges this genus of disease in the class *neuroses,* and order *adynamiæ.* It chiefly arises in persons between thirty and forty years of age, and is principally to be met with in those who devote much time to study, or who lead either a very sedentary or irregular life. A great singularity attendant on it is, that it may and often does continue a great length of time, without any aggravation or remission of the symptoms.

Great grief and uneasiness of mind, intense study, profuse evacuations, excess in venery, hard drinking, particularly of spirituous liquors, and of tea, tobacco, opium, and other narcotics, immoderate repletion, and over distension of the stomach, a deficiency in the secretion of the bile, or gastric juice, and the being much exposed to moist and cold air, when without exercise, are the causes which usually occasion dyspepsia.

A long train of nervous symptoms generally attend on this disease, such as a loss of appetite, nausea, heart-burn, flatulency, acid, fœtid, or nidorous eructations, a gnawing in the stomach when empty, a sense of constriction and uneasiness in the throat, with pain in the side, or sternum, so that the patient at times can only lay on his right side; great costiveness, habitual chilliness, paleness of the countenance, languor, unwillingness to move about, lowness of spirits, palpitations, and disturbed sleep.

The number of these symptoms varies in different cases, with some, being felt only in part; in others, being accompanied even with additional ones, equally unpleasant, such as severe transient pains in the head and breast, and various affections of the sight, as blindness, double vision, &c.

Dyspepsia never proves fatal, unless when, by a very long continuance, it produces great general debility and weakness; and so passes into some other disease, such as dropsy; but it is at all times very difficult to remove, but more particularly so in warm climates.

The morbid appearances to be observed on dissections of this disease, are principally confined to that part of the stomach which is called the pylorus; which is often found either in a contracted, scirrhous, or ulcerated state. In every instance, the stomach is perceived to be considerably distended with air.

The treatment of dyspepsia consists, 1. In obviating the several exciting causes. 2. In relieving urgent symptoms, some of which may tend to prolong the disease. 3. In restoring the tone of the stomach, or of the general system, and thus getting rid of the liability to relapse.

I. In fulfilling the first indication we are often much circumscribed by the circumstances or habits of the patient; and particularly when they have been accustomed to drink spirits, which they can hardly relinquish, or only in a very gradual manner. The diet must be regulated by the particular form of the disease: in those who are liable to acidity, it should be chiefly of an animal nature, with the least acescent vegetable substances, and for drink, toast and water, or soda water, adding a little brandy, if really necessary; where the opposite, or septic tendency appears, which happens especially in persons of a florid complexion, it should consist principally of vegetable matter, particularly the ripe subacid fruits, with the meat of young animals occasionally, and if plain water be not agreeable, table-beer, cyder, &c. may be allowed for drink; and in those of the phlegmatic temperament the most nutritious and digestible articles must be selected, mostly of an animal nature, assisted by the warmer condiments, and the more generous fermented liquors in moderation. It will be generally better to take food oftener, rather than to load the stomach too much at once; but more than four meals in the day can hardly be requisite; if at any other time a craving should occur, a crust of bread or a piece of biscuit may be eaten.

II. Among the symptoms requiring palliation, heart-burn is frequent, resulting from acrimony in the stomach, and to be relieved by antacid, or antiseptic remedies according to circumstances, or diluents and demulcents may answer the purpose. A sense of weight at the stomach with nausea may occasionally indicate a gentle emetic; but will be less likely to occur if the bowels are kept regular. Flatulence may be relieved by aromatics, æther, &c.; and these will be proper for spasmodic, or nervous pains; but if ineffectual, opium should be had recourse to. Vomiting is generally best checked by carbonic acid. When diarrhœa occurs, the aromatic confection is mostly proper, sometimes with a little opium. But the bowels are much more commonly confined, and mild cathartics should be frequently exhibited, as castor oil, rhubarb, aloes, &c.; sometimes the more active, where these do not answer; in those of a florid complexion a laxative diet, with the supertartrate of potash, or other saline cathartic occasionally, may agree better: and where the liver is torpid, mercurials should be resorted to.

III. The third object is to be attempted by tonics, particularly the aromatic bitters, the mineral acids, or the preparations of iron; by the cold bath prudently regulated; by gentle exercise steadily persevered in, particularly walking or riding on horseback; by a careful attention to the diet; by seeking a pure mild air, keeping regular hours, with relaxation and amusement of the mind, &c.

DYSPERMATI'SMUS. (From δυς, bad, and σπερμα, seed.) *Agenesia.* Slow, or impeded emission of semen, during coition, insufficient for the purpose of generation. A genus of disease in the class *locales,* and order *epischeses* of Cullen. The species are: 1. *Dyspermatismus urethralis,* when the obstruction is in the urethra. 2. *Dyspermatismus nodosus,* when a tumour is formed in either corpus cavernosum penis. 3. *Dyspermatismus præputialis,* when the impediment is from a straightness of the orifice of the præpuce. 4. *Dyspermatismus mucosus,* when the urethra is obstructed by a viscid mucus. 5. *Dyspermatismus hypertonicus,* when there is an excess of erection of the penis. 6. *Dyspermatismus epilepticus,* from epileptic fits coming on during coition. 7. *Dyspermatismus apractodes,* from a want of vigour in the genitals. 8. *Dyspermatismus refluus,* in which the semen is thrown back into the urinary bladder.

DYSPHA'GIA. (From δυς, with difficulty, and φαγω, to eat.) A difficulty of deglutition.

DYSPHO'NIA. (From δυς, bad, and φωνη, the voice.) A difficulty of speaking.

DYSPNŒ'A. (From δυς, difficult, and πνεω, to breathe.) *Dyspnoon.* Difficult respiration, without sense of stricture, and accompanied with cough through the whole course of the disease. A genus of disease in the class *neuroses,* and order *spasmi* of Cullen. He distinguishes eight species. 1. *Dyspnœa catarrhalis,* when with a cough there are copious discharges of viscid mucus, called also *asthma catarrhale, pneumodes, pneumonicum,* and *pituitosum.* 2. *Dyspnœa sicca,* when there is a cough without any considerable discharge. 3. *Dyspnœa aërea,* when the disease is much increased by slight changes of the weather. 4. *Dyspnœa terrea,* when earthy or calculous matters are spit up. 5. *Dyspnœa aquosa,* when there is a scarcity of urine and œdematous feet, without the other symptoms of a dropsy in the chest. 6. *Dyspnœa pinguedinosa,* from corpulency. 7. *Dyspnœa thoracica,* when parts surrounding the chest are injured, or deformed. 8. *Dyspnœa extrinseca,* from manifest external causes.

Dy'spnoon. See *Dyspnœa.*

Dysra'chitis. The name of a plaster in Galen.

Dysthy'mia. (From δυς, bad, and θυμος, mind.) Insanity.

Dysto'chia. (From δυς, with difficulty, and τικτω, to bring forth.) Difficult labour or child-birth.

DYSTŒCHI'ASIS. (From δυς, bad, and ϛοιχος, order.) An irregular disposition of the hairs in the eyelids.

DYSU'RIA. (From δυς, difficultly, and ουρον, urine.) *Stillicidium. Ardor urinæ. Culbicio.* A suppression or difficulty in discharging the urine. A total suppression is called ischuria; a partial suppression, dysuria: and this may be with or without heat. When there are frequent, painful, or uneasy urgings to discharge the urine, and it passes off only by drops, or in very small quantities, the disease is called strangury. When a sense of pain, or heat, attends the discharge it passes with difficulty, and is styled ardor urinæ, *heat* of the urine. The dysuria is acute, or chronic. Dr. Cullen places this disease in the class *locales,* and order *epischeses*, containing six species: 1. *Dysuria ardens*, with a sense of heat, without any manifest disorder of the bladder. 2. *Dysuria spasmodica*, from spasm. 3. *Dysuria compressionis*, from a compression of the neighbouring parts. 4. *Dysuria phlogistica*, from violent inflammation. 5. *Dysuria calculosa*, from stone in the bladder. 6. *Dysuria mucosa*, from an abundant secretion of mucus. The causes which give rise to these diseases are, an inflammation of the urethra, occasioned either by venereal sores, or by the use of acrid injections, tumour, ulcer of the prostate gland, inflammation of the kidneys, or bladder, considerable enlargements of the hemorrhoidal veins, a lodgment of indurated fæces in the rectum, spasm at the neck of the bladder, the absorption of cantharides, applied externally or taken internally, and excess in drinking either spirituous or vinous liquors; but particles of gravel, sticking at the neck of the bladder, or lodging in the urethra, and thereby producing irritation, prove the most frequent cause. Gouty matter falling on the neck of the bladder, will sometimes occasion these complaints.

In dysury, there is a frequent inclination to make water, with a smarting pain, heat, and difficulty in voiding it, together with a sense of fulness in the region of the bladder. The symptoms often vary, however, according to the cause which has given rise to it. If it proceeds from a calculus in the kidney or ureter, besides the affections mentioned, it will be accompanied with nausea, vomiting, and acute pains in the loins and region of the ureter and kidney of the side affected. When a stone in the bladder, or gravel in the urethra, is the cause, an acute pain will be felt at the end of the penis, particularly on voiding the last drops of urine, and the stream of water will either be divided into two, or be discharged in a twisted manner, not unlike a cork-screw. If a scirrhus of the prostate gland has occasioned the suppression or difficulty of urine, a hard indolent tumour, unattended with any acute pain, may readily be felt in the perinæum, or by introducing the finger into the rectum.

E.

EAR. *Auris.* The organ of hearing is situated at the side of the head, and is divided into external and internal ear. The *auricula*, commonly called the ear, constitutes the external part, and contains several eminences and depressions, as the *helix*, *antihelix*, *tragus*, *antitragus*, *concha auriculæ*, *scapha*, and *lobulus*. The external auditory passage, containing the wax, proceeds from the middle of it down to the membrane of the tympanum, which divides the external from the internal parts of this organ. Behind the membrana tympani is an irregular cavity, the cavity of the tympanum, in which are four little bones, the *malleus*, *incus*, *stapes*, and *os orbiculare*; and four openings, one of the Eustachian tube, another to the mastoid sinus, the fenestra ovalis, and the fenestra rotunda. The tympanum is terminated by the labyrinth. The labyrinth is the remaining part of the internal ear, consisting of the *cochlea*, *vestibulum*, and *semicircular canals*. The arteries of the ear are the external and internal auditory. The veins empty themselves into the external jugulars. The muscles of the ear are divided into three classes: the common, proper, and internal. The common muscles are, the *attollens aurem*, *anterior auris*, and *retrahentes auris*, which move the whole ear. The proper are, *helicis major*, *helicis minor*, *tragicus*, *antitragicus*, and *transversus auris*: these affect the parts only to which they are connected. The muscles of the internal ear are, *laxator tympani*, *tensor tympani*, and *stapedius*, which belong to the ossicula auditus. The nerves of the external ear are branches of the *nervus auditorius durus*, and those of the internal ear, are branches of the *nervus auditorius mollis*.

EARI'TES. Hæmatites, or blood-stone.

EARTH. *Terra.* Though there seems to be an almost infinite variety of earthy substances scattered on the surface of this globe, yet when we examine them with a chemical eye, we find, not without surprise, that all the earth and stones which we tread under our feet, and which compose the largest rocks, as well as the numerous different specimens which adorn the cabinets of the curious, are composed of a very few simple or elementary earths, in number no more than nine or ten: viz. Silex, lime, magnesia, barytes, strontian, alumine, glucine, zircon, yttria, and perhaps agustine.

These are all the simple earths hitherto known, which nature presents to us completely formed; though one or more of them enters into the composition of a great many bodies. They have a variety of properties which are common to all:—they are dry, incombustible bodies. They are insoluble in water and alkohol, or nearly so, and have little or no taste; at least when combined with carbonic acid. Their specific gravity does not exceed 4.9. When perfectly pure, they assume the form of a white powder, harsh to the touch. They are infusible. They are capable, except silex, of combining with acids, and forming neutral salts. They are likewise disposed to unite with the alkalies, with sulphur, and phosphorus; with metallic oxides, and with each other, either by fusion or solution in water.

Every one of these characters is not perhaps rigorously applicable to each of these bodies; but they all possess a sufficient number of them to render it useful to arrange them under one class. It has been recently shown by chemists, that some of the earths are really compounds of metallic substances with oxygen, and probably that will be found to hold true in them all.

Stones differ from earths principally in cohesion and hardness, and therefore are included under the same general name.

Earth, absorbent. See *Absorbents.*

Earth, aluminous. Earth which contains alumina. See *Alumine.*

Earth, animal calcareous. This term is applied to crabs'-claws, &c. which contain calcareous earth, and are obtained from the animal kingdom.

Earth, argillaceous. See *Alumine.*

Earth-bath. A remedy recommended by some writers on the continent, as a specific in consumption. In this country it produced to the patients very distressing sensations of cold; in some it seemed to be productive of bad effects; and it does not appear that, in any consumptive cases, good effects were ever derived from its use.

Earth, bolar. See *Bole.*

Earth, fullers'. *Cimolia purpurescens.* A compact bolar earth, commonly of a greyish colour. It is sometimes applied by the common people to inflamed breasts, legs, &c. with a view of cooling them.

Earth, heavy. See *Barytes.*

Earth, Japan. See *Acacia catechu.*

Earth, mineral calcareous. Those calcareous earths which are obtained from the mineral kingdom. The term is applied in opposition to those obtained from animals.

Earth-nut. See *Bunium.*

Earth, sealed. *Terra sigillata.* Little cakes of bolar earths, which are stamped with impressions. They were formerly in high estimation as absorbents, but now fallen into disuse.

Earth-worm. *Lumbricus terrestris. Vermis terrestris.* These insects are supposed to possess a diuretic and antispasmodic virtue, with which views they are occasionally employed in foreign countries.

Ear-wax. *Cerumen aurium.* A waxy secretion found in the meatus auditorius externus, into which it is separated by the glands around that canal.

Eaton's styptic. French brandy highly impregnated with calcined green vitriol. A remedy for checking hæmorrhages.

Eau-de-luce. See *Spiritus ammoniæ succinatus.*

Eau-de-rabel. This is composed of one part of sulphurous acid to three of rectified spirit of wine. It is much used in France, when diluted, in the cure of gonorrhœas, leucorrhœa, &c.

Ebel. The seeds of sage, or of juniper.

Ebe'num. Indian ebony. It is supposed to be ophthalmic.

Ebe'smech. A name in Langius for quicksilver.

Ebi'scus. The hibiscus, or marsh mallow.

Ebrieca'tum. (From *ebrio,* to be drunk.) By this term Paracelsus expresses loss of sense by drunkenness.

Ebrieca'tum cæle'ste. By this term Paracelsus means that kind of enthusiasm which is affected by many heathen priests.

Ebsemech. A name for quicksilver.

EBULLI'TION. (From *ebullio,* to bubble up.) *Ebullitio.* Boiling. This consists in the change which a fluid undergoes from a state of liquidity to that of an elastic fluid, in consequence of the application of heat, which dilates and converts it into vapour.

E'BULUS. (From *ebullio,* to make boil; so called because of its supposed use in purifying the humours of the body.) See *Sambucus ebulus.*

Ecbo'lica. (From εκϐαλλω, to cast out.) Medicines which were formerly said to cause abortion.

Ecbo'lios. (From εκϐαλλω, to cast out.) Miscarriage.

Ecbra'smata. (From εκϐραζω, to be very hot.) *Ecchymata.* Painful fiery pimples in the face, or surface of the body.

Ecbra'smus. (From εκϐραζω, to become hot.) Fermentation.

Ecbyrso'mata. (From εκ, and βυρσα, the skin.) Protuberances of the bones at the joints, which appear through the skin.

Eccatha'rtica. (From εκκαθαιρω, to purge outwards.) According to Gorræus, eccathartics are medicines which open the pores of the skin; but in general they are understood to be deobstruents. Sometimes expectorants are thus called, and also purgatives.

Ecchylo'ma. (From εκ, and χυλος, juice.) An extract.

Ecchy'mata. (From εκχυω, to pour out.) See *Ecbrasmata.*

ECCHYMO'MA. (Εκχυμωμα: from εκχυω, to pour out.) *Ecchymosis.* Sometimes called *crustula* and *sugillatio.* Extravasation. A black and blue swelling, either from a bruise or spontaneous extravasation of blood. A genus of disease in the class *locales*, and order *tumores* of Cullen.

Ecchymo'ma arterio'sum. The false aneurism.

Ecchymo'sis. See *Ecchymoma*.

E'cclisis. (From εκκλινω, to turn aside.) A luxation or dislocation.

E'ccope. (From εκκοπτω, to cut off.) The cutting off any part.

Ecco'peus. (From εκκοπτω, to cut off.) An antient instrument, the raspatory, used in trepanning.

Eccopro'tica. (From εκ, and κοπρος, dung.) Opening medicines, whose operation is very gentle; such as manna, senna, &c.

Eccrinocri'tica. (From εκκρινω, to secrete, and κρινω, to judge.) Judgments formed from the secretions.

Eccrinolo'gia. *Eccrinologica.* (From εκκρινω, to secrete, and λογος, a discourse.) The doctrine of secretions.

E'ccrisis. (From εκκρινω, to secrete.) A secretion of any kind.

Eccymo'sis. See *Ecchymoma*.

E'cdora. (From εκδερω, to excoriate.) An excoriation: and particularly used for an excoriation of the urethra.

Ecdo'ria. (From εκδερω, to excoriate.) Medicines which excoriate and burn through the skin.

Echeco'llon. (From εχω, to have, and κολλα, glue.) *Echecollum.* Any topical glutinous remedy.

Echetro'sis. So Hippocrates calls the white briony.

Echini'des. In Hippocrates it is mentioned as what he used for purging the womb with.

Echinophtha'lmia. (From εχινος, a hedge-hog, and οφθαλμια, an inflammation of the eye.) An inflammation of the hairy part of the eyelids, where the hairs bristle out like the quills of an echinus, or hedgehog.

Echinopo'dium. (From εχινος, a hedgehog, and πους, a foot; so named because its flowers resemble the foot of an urchin.) A species of broom, or genista.

Echi'nops. (From εχινος, as beset with prickles.) *Crocodilion. Acanthalruca, Scabiosa carduifolia. Sphærocephala elatior. Echinopus.* Globe thistle. *Echinops sphærocephalus* of Linnæus. It is raised in our gardens. The root and seeds are moderately diuretic, but not used.

Echi'nopus. See *Echinops*.

E'CHIUM. (From εχις, a viper; so called because it was said to heal the stings of vipers.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Viper's bugloss.

E'chium Ægypti'acum. Wall bugloss; vulnerary, sudorific.

E'chos. (Ηχος, sound.) In Hippocrates it signifies the same as the tinnitus aurium, or noise in the ears.

E'chysis. (From εχυω, to pour out.) A fainting, or swooning.

Ecla'mpsia. (From εκλαμπω, to shine.) See *Eclampsis*.

ECLA'MPSIS. (From εκλαμπω, to shine.) *Eclampsia.* It signifies a splendour, brightness, effulgence, flashing of light, scintillation. It is a flashing light or those sparklings which strike the eyes of epileptic patients. Cœlius Aurelianus calls them *circuli ignei,* scintillations, or fiery circles. Though only a symptom of the epilepsy, Hippocrates puts it for epilepsy itself.

Ecle'ctica. (From εκλεγω, to select.) Archigenes and some others selected from all other sects what appeared to them to be the best and most rational; hence they were called *Eclectics,* and their medicine *Eclectic medicine.*

Ecle'ctos. (From εκλειχω, to lick up.) A linctus, or soft medicine to be licked up.

Ecle'gma. (From εκλειχω, to lick.) Is a form of medicine made by the incorporation of oils with syrups, and which is to be taken upon a liquorice stick; the same as *Linctus.*

E'clysis. (From εκλυω, to dissolve.) An universal faintness.

Ecma'gma. (From εκμασσω, to form together.) A mass of substances kneaded together.

Ecpepie'menos. (From εκπιεζω, to press out.) An epithet for ulcers with protuberating lips.

Ecphra'ctic. (From εκφρασσω, to remove obstructions.) Are such medicines as incide and render more thin tough humours, so as to promote their discharge.

Ecphra'ctica. (From εκφρασσω, to remove obstructions.) Deobstruent medicines.

Ecphra'xis. (From εκφρασσω, to remove obstruction.) A diaphoresis; an opening of the pores.

E'cphyas. (From εκ, and φυω, to produce.) An appendix, or excrescence. Some call the appendicula vermiformis thus.

E'cphyse. (From εκφυσαω, to blow out.) Flatus from the bladder through the urethra, and from the womb through the vagina.

Ecphyse'sis. (From εκφυσαω, to breathe through.) A quick expulsion of the air from the lungs.

E'cphysis. (From εκφυω, to produce.) An apophysis, or appendix. A process.

Ecpie'sma. (From εκπιεζω, to press out.) A fracture of the skull, in which the bones press inwardly.

Ecpie'smos. (From εκπιεζω, to press out.) A disorder of the eye, in which the globe is almost pressed out of the socket by an afflux of humours.

Ecplero'ma. (From εκπληροω, to fill.) In Hippocrates they are hard balls of leather, or other substances, adapted to fill the arm-pits, while by the help of the heels, placed against the balls, and repressing the same, the luxated os humeri is reduced into its place.

Ecple′xis. (From εκπλησσω, to terrify or astonish.) A stupor, or astonishment, from sudden external accidents.

E′cpnoe. (From εκϖνεω, to breathe.) Expiration; that part of respiration in which the air is expelled from the lungs.

Ecpto′ma. (From εκπιπτω, to fall out.)

1. A luxation of a bone.
2. The exclusion of the secundines.
3. Speaking of corrupt parts, it signifies a falling off.
4. An hernia in the scrotum.
5. A falling down of the womb.

Ecpy′ctica. (From εκπυκαζω, to condense.) Incrassants. Medicines that render the fluids more solid.

Ecpye′ma. (From εκ, and πυον, pus.) A copious collection of pus or matter, from the suppuration of a tumour.

Ecre′gma. (From εκρηγνυμι, to break.) A rupture.

Ecre′xis. (From εκρηγνυμι, to break.) A rupture. Hippocrates expresses by it a rupture or laceration of the womb.

Ecrhy′thmos. (From εκ, and ρυθμος, harmony.) A term applied to the pulse, and signifies that it is disorderly or irregular.

E′croe. (From εκρεω, to flow out.) An efflux, or the course by which any humour which requires purging is evacuated.

Ecruelles. The French name for scrophula.

E′crysis. (From εκρεω, to flow out.) In Hippocrates it is an efflux of the semen before it receives the conformation of a fœtus, and therefore is called an efflux, to distinguish it from abortion.

Ecsarco′ma. (From εκ, and σαρξ, flesh.) A fleshy excrescence.

E′CSTASIS. (Εκϛασις: from εξιϛαμαι, to be out of one's senses.) An ecstacy, or trance. In Hippocrates it signifies a delirium. Dr. Cullen ranks it as a kind of apoplexy.

Ecstro′phius. (From εκϛρεφω, to invert.) An epithet for any medicine, that makes the blind piles appear outwardly.

Ecthely′nsis. (From εκθηλυνω, to render effeminate.) Softness. It is applied to the skin and flesh, when lax and soft, and to bandages, when not sufficiently tight.

Ecthli′mma. (From εκθλιϐω, to press out against.) An ulceration caused by pressure of the skin.

Ecthli′psis. (From εκθλιϐω, to press out against.) Elision, or expression. It is spoken of swelled eyes, when they dart forth sparks of light.

E′cthyma. (From εκθυω, to break out.) A pustule, or cutaneous eruption.

Ecthy′mata. (From εκθυω, to break out.) Pimples, pustules, or cutaneous eruptions.

Ectillo′tica. (From εκτιλλω, to pull out.) Medicines which eradicate tubercles or corns, or destroy superfluous hair.

ECTO′PIA. (From εκτοπος, out of place.) Displaced.

ECTO′PIÆ. Parts displaced. An order in the class *locales* of Cullen's nosology.

Ectrapeloga′stros. (From εκτρεπομαι, to degenerate, and γαϛηρ, a belly.) One who has a monstrous belly, or whose appetite is voraciously large.

Ectri′mma. (From εκτριϐω, to rub off.) An attrition, or galling. In Hippocrates it is an exulceration of the skin about the os sacrum.

E′ctrope. (From εκτρεπω, to divert, pervert, or invert.) It is any duct by which the humours are diverted and drawn off. In P. Ægineta it is the same as *Ectropium.*

ECTRO′PIUM. (From εκτρεπω, to evert.) An eversion of the eyelids so that their internal surface is outermost.

There are two species of this disease; one produced by an unnatural swelling of the lining of the eyelids, which not only pushes their edges from the eyeball, but also presses them so forcibly, that they become everted; the other arising from a contraction of the skin covering the eyelid, or of that in the vicinity, by which means the edge of the eyelid is first removed for some distance from the eye, and afterwards turned completely outward, together with the whole of the affected eyelid.

The morbid swelling of the lining of the eyelids, which causes the first species of ectropium, arises mostly from a congenital laxity of this membrane, afterwards increased by obstinate chronic ophthalmies, particularly of a scrophulous nature, in relaxed, unhealthy subjects; or else the disease originates from the small-pox affecting the eyes.

While the disease is confined to the lower eyelid, as it most commonly is, the lining of this part may be observed rising in the form of a semilunar fold, of a pale red colour, like the fungous granulations of wounds, and intervening between the eye and eyelid, which latter it in some measure everts. When the swelling is afterwards occasioned by the lining of both the eyelids, the disease assumes an annular shape, in the centre of which the eyeball seems sunk, while the circumference of the ring presses and everts the edges of the two eyelids, so as to cause both great uneasiness and deformity. In each of the above cases, on pressing the skin of the eyelids with the point of the finger, it becomes manifest that they are very capable of being elongated, and would readily yield, so as entirely to cover the eyeball, were they not prevented by the intervening swelling of their membranous lining.

Besides the very considerable deformity

which the disease produces, it occasions a continual discharge of tears over the cheek, and, what is worse, a dryness of the eyeball, frequent exasperated attacks of chronic ophthalmy, incapacity to bear the light, and lastly, opacity and ulceration of the cornea.

The second species of ectropium, or that arising from a contraction of the integuments of the eyelids, or neighbouring parts, is not unfrequently a consequence of puckered scars, produced by the confluent smallpox, deep burns, or the excision of cancerous or encysted tumours, without saving a sufficient quantity of skin; or lastly, the disorder is the effect of malignant carbuncles, or any kind of wound attended with much loss of substance. Each of these causes is quite enough to bring on such a contraction of the skin of the eyelids as to draw the parts towards the arches of the orbits, so as to remove them from the eyeball, and turn their edges outward. No sooner has this circumstance happened, than it is often followed by another one equally unpleasant, namely, a swelling of the internal membrane of the affected eyelids, which afterwards has a great share in completing the eversion. The lining of the eyelids, though trivially everted, being continually exposed to the air, and irritation of extraneous substances, soon swells, and rises up like fungus. One side of this fungus-like tumour covers a part of the eye-ball; the other pushes the eyelid so considerably outwards, that its edge is not unfrequently in contact with the margin of the orbit. The complaints induced by this second species of ectropium are the same as those brought on by the first; it being noticed, however, that in both cases, whenever the disease is very inveterate, the fungous swelling of the inside of the eyelids becomes hard, coriaceous, and as it were callous.

Although, in both species of ectropium, the lining of the eyelids seems equally swollen, yet the surgeon can easily distinguish to which of the two species the disease belongs. For, in the first, the skin of the eyelids, and adjoining parts, is not deformed with scars; and by pressing the everted eyelid with the point of the finger, the part would with ease cover the eye, were it not for the intervening fungous swelling. But in the second species of ectropium, besides the obvious cicatrix and contraction of the skin of the eyelids, or adjacent parts, when an effort is made to cover the eye with the everted eyelid, by pressing upon the latter part with the point of the finger, it does not give way so as completely to cover the globe, as it ought to do, only yielding for a certain extent: or it does not move in the least from its unnatural position, by reason of the integuments of the eyelids having been so extensively destroyed, that their margin has become adherent to the arch of the orbit.

Ectro′sis. (Εκτρωσις: from εκτιτρωσκω, to miscarry.) A miscarriage.

Ectro′tica. (From εκτιτρωσκω, to miscarry.) *Ectyrotica.* Medicines which cause abortion.

Ectylo′tica. See *Ectillotica.*

Ectyro′tica. See *Ectrotica.*

Ecze′ma. (From εκζεω, to boil out.) *Eczesma.* A hot, painful eruption, or pustule. Mr. Pearson calls the erythema mercuriale, eczema mercuriale.

Ede′lphus. Prognosis from the nature of elements.

E′dèra trifo′lia. The poison-tree of America.

E′des. A name for amber.

Ede′ssenum. *Pelarium.* An eye-water of tragacanth, arabic, acacia, opium, &c.

E′detz. Amber.

E′dic. *Edich. Edir.* An old name for iron.

E′dra. A fracture; also the lower part of the rectum.

Edulcora′ntia. (From *edulco,* to make sweet.) Edulcorants. Sweeteners. Medicines which absorb the vicious humours of the body, sweeten the fluids, and deprive them of their acrimony.

EFFERVESCENCE. (From *effervesco,* to grow hot.) *Effervescentia.* That agitation which is produced by mixing substances together, which cause the evolution of a gas. A small degree of ebullition.

E′ffides. An old name for ceruss.

E′ffila. Freckles.

EFFLORESCENCE. (From *effloresco,* to blow as a flower.) *Efflorescentia.*

1. A preternatural redness of the skin.
2. In chemistry, it means that phenomenon which takes place upon crystals, producing a white powder when exposed to air.

EFFLU′VIUM. (From *effluo,* to spread abroad.) See *Contagion.*

Effractu′ra. (From *effringo,* to break down.) *Ecpiesma.* A species of fracture, in which the bone is much depressed by the blow.

EFFUSION. (From *effundo,* to pour out.) *Effusio.* In surgery, it means the escape of any fluid out of the vessel, or viscus, naturally containing it, and its lodgment in another cavity, in the cellular substance, or in the substance of parts. Effusion also sometimes signifies the natural secretion of fluids from the vessels; thus surgeons frequently speak of the coagulable lymph being effused on different surfaces.

Ege′ries. (From *egero,* to carry out.) *Egestio.* An excretion, or evacuation.

EGG. *Ovum.* The eggs of poultry are chiefly used as food: the different parts are likewise employed in pharmacy and in medicine. The calcined shell is esteemed as an absorbent. The oil of the egg is softening, and is used externally to burns and chaps. The yolk of the egg renders oil miscible with water, and is triturated with the same view with resinous and other substances. Raw eggs have been much recommended as a popular remedy for jaundice.

Egrego′rsis. (From εγρηγορεω, to watch.) A watchfulness. A morbid want of sleep.

Ejacula′ntia. (From *ejaculo*, to cast out.) *Ejaculatoria.* The vessels which convey the seminal matter secreted in the testicles to the penis. These are the epididymis, and the vasa deferentia; the vesiculæ seminales are the receptacles of the semen.

Eje′ctio. (From *ejicio*, to cast out.) *Excretio.* The discharging of humours or excrements.

Ei′lamis. (From ειλεω, to involve.) A membrane involving the brain.

Eile′ma. (From ειλεω, to form convolutions.) In Hippocrates, it signifies painful convolutions of the intestines from flatulence. Sometimes it signifies a covering. Vogel says, it is a fixed pain in the bowels, as if a nail was driven in.

Ei′leon. (From ειλεω, to wind.) Gorræus says it is a name of the intestinum ileum.

Ei′leos. (From ειλεω, to form convolutions.) The iliac passion.

Ei′sbole. (From εις, into, and βαλλω, to cast.) It signifies strictly an injection, but is used to express the access of a distemper, or of a particular paroxysm.

Ei′spnoe. (From εις, into, and πνεω, to breathe.) Inspiration of air.

Ela ca′lli. An Indian cathartic shrub, the *Euphorbia neriifolia* of Linnæus.

Elæa′gnon. (From ελαιον, oil, and αγνος, chaste.) The agnus castus was formerly so called.

Elæo′meli. (From ελαιον, oil, and μελι, honey.) A sweet purging oil, like honey.

Elæosa′ccharum. (From ελαιον, oil, and σακχαρον, sugar.) A mixture of essential oil with sugar.

Elæoseli′num. Water parsley. See *Eleoselinum.*

Elais guinee′nsis. A species of palm which grows spontaneously on the coast of Guinea, but is much cultivated in the West Indies. From this tree, according to some, is obtained the palm-oil, which is considered as an emollient and strengthener of all kinds of weakness of the limbs. It also is recommended against bruises, strains, cramps, pains, swellings, &c.

Elambica′tio. A method of analysing mineral waters.

Ela′nula. An old name for alum.

Elaphobo′scum. (From ελαφος, a stag, and βοσκω, to eat; so called, because deer eat them greedily.) The wild parsnep. See *Pastinaca.*

Elaphosco′rodon. (From ελαφος, the stag, and σκοροδον, garlic.) Stag's or viper's garlic.

E′laquir. Red Vitriol.

E′las ma′ris. Burnt lead.

Ela′sma. (From ελαυνω, to drive.) A lamina or plate of any kind. A term used to express a clyster-pipe.

Elastic fluid. See *Gaz.*

Elastic gum. See *Siphonia elastica.*

ELASTICITY. A force in bodies, by which they endeavour to restore themselves to the posture from whence they were displaced by any external force. To solve this property, many have recourse to the universal law of nature, attraction, by which the parts of solid and firm bodies are caused to cohere together: whereby, when hard bodies are struck or bent, so that the component parts are a little moved from one another, but not quite disjoined or broken off, nor separated so far as to be out of the power of the attracting force, by which they cohere together; they certainly must, on the cessation of the external violence, spring back with a very great velocity to their former state. But in this circumstance, the atmospherical pressure will account for it as well; because such a violence, if it be not great enough to separate the constituent particles of a body far enough to let in any foreign matter, must occasion many vacuola between the separated surfaces, so that upon the removal of the external force, they will close again by the pressure of the aërial fluid upon the external parts, i. e. the body will come again into its natural posture. The included air, likewise, in most bodies, gives that power of resilition upon their percussion.

If two bodies perfectly *elastic* strike one against another, there will be or remain in each the same relative velocity as before, i. e. they will recede with the same velocity as they met together. For the compressive force, or the magnitude of the stroke in any given bodies, arises from the relative velocity of those bodies, and is proportional to it: and bodies perfectly *elastic* will restore themselves completely to the figure they had before the shock; or, in other words, the restitutive force is equal to the compressive, and therefore must be equal to the force with which they came together, and consequently they must by elasticity recede again from each other with the same velocity. Hence, taking equal times before and after the shock, the distances between the bodies will be equal; and therefore the distances of them from the common centre of gravity will, in the same times, be equal. And hence the laws of percussion of bodies perfectly elastic are easily deduced.

ELATE′RIUM. (From ελαυνω, to stimulate or agitate: so named from its great purgative qualities.) See *Momordica Elaterium.*

Elathe′ria. A name for the cascarilla bark.

Elati′ne. (From ελαττων, smaller, being the smaller species.) See *Antirrhinum Elatine.*

Elati'tes. Bloodstone.

Elco'sis. (From ελκος, an ulcer.) A disease attended with fœtid, carious, and chronic ulcers. The term is seldom used.

Elder. See *Sambucus.*

Elder dwarf. See *Sambucus Ebulus.*

Elecampane. See *Inula helenium.*

ELECTRICITY. (*Electricitas,* from *electrum,* ηλεκτρον, from ηλεκτωρ, the sun, because of its bright shining colour; or from ελκω, to draw, because of its magnetic power.) A property which certain bodies possess when rubbed, heated, or otherwise excited, whereby they attract remote bodies, and frequently emit sparks or streams of light. The antients first observed this property in amber, which they called *electrum,* and hence arose the word electricity. The efficacy of electricity in the cure of several diseases has been supported by many very respectable authorities, especially in paralytic diseases. It considerably augments the circulation of the blood, and excites the action of the absorbents.

Electro'des. (From ηλεκτρον, amber.) An epithet for stools which shine like amber.

Ele'ctrum minera'le. The tincture of metals. It is made of tin and copper, to which some add gold, and double its quantity of martial regulus of antimony melted together; from these there results a metallic mass, to which some chemists have given the name of *electrum minerale.* This mass is powdered and detonated with nitre and charcoal to a kind of scoria; it is powdered again whilst hot, and then digested in spirit of wine, whence a tincture is obtained of a fine red colour.

ELECTUA'RIUM. An electuary. The London Pharmacopœia refers those articles which were formerly called electuaries to confections.

Electua'rium antimo'nii. ℞. Electuarii sennæ, ℥j; guaiaci gummi, hydrargyri cum sulphure, antimonii ppti. sing. ℥ss; syrupi simplicis q. s. misce. Of this electuary, from a drachm to about two drachms is given twice a day, in those cutaneous diseases which go under the general name of scorbutic. It is usually accompanied with the decoctions of elm bark or sarsaparilla.

Electua'rium ca'ssiæ. See *Confectio cassiæ.*

Electua'rium ca'techu. *Confectio Japonica.* Electuary of catechu, commonly called Japonic confection. Take of mimosa catechu, four ounces; kino, three ounces; cinnamon, nutmeg, each one ounce; opium diffused in a sufficient quantity of Spanish white wine one drachm and a half; syrup of red roses boiled to the consistence of honey, two pounds and a quarter. Reduce the solids to powder, and, having mixed them with the opium and syrup, make them into an electuary. A very useful astringent, and perhaps the most efficacious way of giving the catechu to advantage. Ten scruples of this electuary contain one grain of opium.

Electua'rium cincho'næ cum na'tro. ℞ natri ppti ʒjj; pulveris cinchonæ unc: mucilaginis gummi arabici q. s. misce. In this composition mucilage is preferred to syrup on account of its covering the taste of the bark much more advantageously. It should, for this purpose, however, be made thin, otherwise it will increase the bulk of the electuary too much.

This remedy will be found an excellent substitute for the burnt sponge, whose powers as a remedy in scrophula, are known solely to depend on the proportion of natron contained in it. The dose is two drachms, twice or thrice a day.

Electua'rium opia'tum. See *Confectio opii.*

Eleli'sphacos. (From ελελιζω, to distort, and σφακος, sage: so named from the spiral coiling of its leaves and branches.) A species of sage.

Ele'mbrat. An obsolete term for alkaline salts.

ELEMENTS. Radicals. First principles. Substances which can no further be divided or decomposed by chemical analysis. However, though many substances cannot be decomposed by the chemist into constituent parts, this does not demonstrate them to be simple. Though they are as *yet not decomposed,* it does not follow that they are *undecomposable;* as, perhaps, neither our senses nor our instruments will ever reach those substances which by their nature admit of no sort of decomposition. But until sufficient proofs are given of their compound nature, sound philosophy requires us to consider them as simple bodies. It is not necessary, that the parts should have been actually separated from one another. Some substances are presumed to be compound from analogy; thus oxygen gas is considered as consisting of caloric and oxygen, though this last has never been exhibited in a separate state. The antients reckoned only four elements, fire, air, water, and earth: all of which are at present acknowledged to be compound. But on the other hand we have formed a much more numerous list: light, caloric, oxygen, azote, hydrogen, carbon, boron, sulphur, phosphorus, the metals, and the metallic bases of the earths, and fixed alkalies. Whether to these should be added the magnetic and electric fluids, with chlorine, fluorine and iodine, is not yet determined.

E'LEMI. (It is said this is the Ethiopian name.) Gum elemi. The parent plant of this resin is supposed to be the *Amyris elemifera,* which see.

E'lemi ungue'ntum. See *Unguentum elemi compositum.*

Elemni'fera curassa'vica a'rbor. The gum elemi-tree.

Ele'ngi. A tree of Malabar. Cardiac.

Eleochry'sum. (From ηλιος, the sun, and χρυσος, gold; so called from their shining yellow appearance.) Goldilocks. See *Gnaphalium Stœchas.*

Eleoseli'num. (From ελος, a lake, and σελινον, parsley.) See *Apium.*

Elepha'ntia. (From ελεφας, an elephant; so called from the great enlargement of the body in this disorder.) A species of anasarca.

Elepha'ntia a'rabum. In Dr. Cullen's nosology it is synonymous with elephantiasis. The term is, however, occasionally confined to this disease when it affects the feet.

ELEPHANTI'ASIS. (From ελεφας, an elephant; so named from the legs of people affected with this disorder growing scaly, rough, and wonderfully large, at an advanced period, like the legs of an elephant.) *Elephas. Elephantia. Lazari morbus vel malum. Phœniceus morbus.* A disease that attacks the whole body, but mostly affects the feet, which appear somewhat like those of the elephant. It is known by the skin being thick, rough, wrinkly, unctuous, and void of hair, and mostly without the sense of feeling. It is said to be contagious. Cullen makes it a genus of disease in the class *cachexiæ,* and order *impetigines.*

Elephantiasis has generally been supposed to arise in consequence of some slight attack of fever, on the cessation of which the morbid matter falls on the leg, and occasions a distension and tumefaction of the limb, which is afterwards overspread with uneven lumps, and deep fissures. By some authors it has been considered as a species of leprosy; but it often subsists for many years without being accompanied with any of the symptoms which characterise that disease.

It sometimes comes on gradually, without much previous indisposition; but more generally, the person is seized with a coldness and shivering, pains in the head, back, and loins, and some degree of nausea. A slight fever then ensues, and a severe pain is felt in one of the inguinal glands, which, after a short time, becomes hard, swelled, and inflamed. No suppuration, however, ensues; but a red streak may be observed running down the thigh from the swelled gland to the leg. As the inflammation increases in all the parts, the fever gradually abates, and perhaps, after two or three days continuance, goes off. It, however, returns again at uncertain periods, leaving the leg greatly swelled with varicose turgid veins, the skin rough and rugged, and a thickened membrana cellulosa. Scales appear also on the surface, which do not fall off, but are enlarged by the increasing thickness of the membranes; uneven lumps, with deep fissures, are formed, and the leg and foot become at last of an enormous size.

A person may labour under this disease many years, without finding much alteration in the general health, except during the continuance of the attacks; and perhaps the chief inconvenience he will experience is the enormous bulky leg which he drags about with him. The incumbrance has, indeed, induced many who have laboured under this disease to submit to an amputation; but the operation seldom proves a radical cure, as the other leg frequently becomes affected.

Hilary observes, that he never saw both legs swelled at the same time. Instances where they have alike acquired a frightful and prodigious size, have, however, frequently fallen under the observation of other physicians.

Elephanti'num emplastrum. A plaster described by Oribasius. Celsus describes one of the same name, but very different in qualities.

E'lephas. (Ελεφας, the elephant.) The disease called elephantiasis; also aqua fortis.

Ele'rsna. An obsolete term for black lead.

Ele'smatis. An old term for burnt lead.

Ele'ttari pri'mum. The true amomum.

ELETTA'RIA. (From *elettari.*) This is a new genus of plants formed by Dr. Maton, to which the lesser cardamom is referred. Class, *Monandria.* Order, *Monogynia.*

Eletta'ria cardamo'mum. *Cardamomum minus.* Lesser or officinal cardamom. *Amomum repens,* or *le cardamome de la côte de Malabar,* of Sonnerat. *Elettaria cardamomum,* of Maton, in Act. Soc. Lin. The seeds of this plant are imported in their capsules or husks, by which they are preserved, for they soon lose a part of their flavour when freed from this covering. On being chewed, they impart a glowing aromatic warmth, and grateful pungency; they are supposed gently to stimulate the stomach, and prove cordial, carminative, and antispasmodic, but without that irritation and heat which many of the other spicy aromatics are apt to produce. Simple and compound spirituous tinctures are prepared from them, and they are ordered as a spicy ingredient in many of the officinal compositions.

Eleuthe'ria bark. See *Croton cascarilla.*

Eleuthe'riæ co'rtex. See *Croton cascarilla.*

Eleva'tio. (From *elevo,* to lift up.) Elevation. Sublimation.

ELEVA'TOR. (From *elevo,* to lift up.) A muscle is so called whose office is to lift up the part to which it is attached. Also a chirurgical instrument, *elevatorium,* with which surgeons raise any depressed portion of bone, but chiefly those of the cranium.

Eleva'tor la'bii inferio'ris pro'prius. See *Levator labii inferioris.*

Eleva′tor la′bii superio′ris pro′prius. See *Levator labii superioris alæque nasi.*

Eleva′tor labio′rum. See *Levator anguli oris.*

Eleva′tor na′si ala′rum. Muscles of the alæ of the nose.

Eleva′tor o′culi. See *Rectus superior oculi.*

Eleva′tor pa′lpebræ superi′oris. See *Levator palpebræ superioris.*

Eleva′tor sca′pulæ. See *Levator scapulæ.*

Elevato′rium. (From *elevo*, to lift up.) An instrument to raise a depression in the skull.

Eli′banum. See *Juniperus lycia.*

Elichry′sum. (From *ηλιος*, the sun, and *χρυσος*, gold; so called from their shining yellow appearance.) See *Gnaphalium Stœchas.*

Eli′drion. Mastich; a mixture of brass.

Eli′gma. An old name for a linctus.

Elioseli′num. See *Eleoselinum.*

Elithroi′des. The vaginal coat of the testicle.

Elixa′tio. (From *elixo*, to boil.) The act of seething, or boiling.

ELI′XIR. (From *elekser*, an Arabic word signifying quintessence.) A term formerly applied to many preparations similar to compound tinctures. It is now very little employed.

Elixir of health. *Elixir salutis.* A term formerly applied to what is now called compound tincture of senna. See *Tinctura sennæ.*

Eli′xir parego′ricum. Paregoric elixir. See *Tinctura camphoræ composita.*

Eli′xir proprieta′tis. A preparation of aloes.

Eli′xir sa′crum. A tincture of rhubarb and aloes.

Eli′xir salu′tis. See *Tinct. Sennæ.*

Eli′xir stoma′chicum. Stomachic elixir. See *Tinctura gentianæ composita.*

Elixiva′tio. (From *elixo*, to boil, or from *lixivium*, lye.) The extraction of a fixed salt from vegetables, by an affusion of water.

Elle′borum. See *Helleborus* and *Veratrum.*

Elm. See *Ulmus.*

Elmi′nthes. (From ειλεω, to involve, from its contortions.) Worms.

Elm-leaved sumach. See *Rhus coriaria.*

Elo′des. (From ελος, a swamp.) A term given to a sweating fever, from its great moisture.

Elonga′tio. (From *elongo*, to lengthen out.) An imperfect luxation, where the ligament is only lengthened, and the bone not put out of its socket.

ELOY, Nicholas Francis Joseph, was born at Mons in 1714, and died in 1788, having practised as a physician with great ability and humanity. He had the honour of attending Prince Charles of Lorraine. He was a man of extensive learning, and, notwithstanding his professional avocations, was author of several publications. The principal of these, an Historical Medical Dictionary, was originally in two octavo volumes; but in 1778 it appeared greatly improved and enlarged in four volumes quarto. An Introduction to Midwifery; a Memoir on Dysentery; Reflections on the Use of Tea; and a Medico-Political Tract on Coffee; were likewise written by this author. The latter work procured him the reward of a superb snuff-box from the estates of Hainault, inscribed "Ex dono Patriæ."

ELUTRIATION. (From *elutrio*, to cleanse.) Washing over. It is the pouring a liquor out of one vessel into another, in order to separate the subsiding matter from the clear and fluid part.

Elu′vies. (From *eluo*, to wash out.) The effluvium from a swampy place. Also the humour discharged in fluor albus.

Eluxa′tio. (From *eluxo*, to put out of joint.) A luxation, or dislocation.

Elymagro′stis. (From *ελειμος*, the herb panic, and *αγρωϛις*, wild.) Wild panic.

Ely′mus. (Ελειμος.) The herb panic.

ELYOT, Sir Thomas, was born of a good family in Suffolk, about the beginning of the sixteenth century. After studying at Oxford, and improving himself by travelling, he was introduced at court; and Henry VIII. conferred upon him the honour of knighthood, and employed him in several embassies. He distinguished himself in various branches of learning, as well as by patronising learned men; and was generally beloved by his cotemporaries for his virtues and accomplishments. He died in 1546, and was buried in Cambridgeshire, of which he had been sheriff. Among other studies, he was partial to medicine, and made himself master of the ancient authors on that subject, though he never exercised the profession. He published a work about the year 1541, called "The Castell of Health," which was much admired, even by some of the faculty: in this he is a strong advocate for temperance, especially in sexual pleasures. He also notices, that catarrhs were much more common, than they had been forty years before; which he ascribes chiefly to free living, and keeping the head too much covered. He also wrote and translated several other works, but not on medical subjects.

ELYTROCE′LE. (From *ελυτρον*, the vagina, and *κηλη*, a tumour.) A hernia in the vagina.

Elytroi′des. (*Elytroides*; from *ελυτρον*, a sheath, and *ειδος*, form.) Like a sheath. The tunica vaginalis is so called by some writers, because it includes the testis like a sheath.

Ely′tron. (From ελυω, to involve.) The vagina. A sheath. The membranes which involve the spinal marrow are called elytra, ελυτρα.

Emargina′tio. (From *emargino*, to cleanse the edges.) The cleansing of the edges of wounds from scurf and filth.

Emascula′tus. (From *emasculo*, to render impotent.) Having the testicles in the belly, and not fallen into the scrotum.

Emba′mma. (From εμβαπτω, to immerge in.) A medicated pickle to dip the food in.

E′mbole. (From εμβαλλω, to put in.) The reduction or setting of a dislocated bone.

E′mbolum. (From εμβαλλω, to cast out; so named because it ejects the semen.) The penis.

Embre′gma. (From εμβρεχω, to make wet.) A fluid application to any part of the body.

EMBROCA′TIO. (From εμβρεχω, to moisten or soak in.) *Embroche.* An embrocation. A fluid application to rub any part of the body with. Many use the term, however, as synonymous with liniment. The following embrocations are noticed in the Pharmacopœia Chirurgica.

Embroca′tio alu′minis. ℞. Aluminis ʒjj. Aceti, spiritus vinosi tenuioris, sing. ℔ss. For chilblains and diseased joints.

Embroca′tio ammo′niæ. ℞ embrocationis ammoniæ acetatis ℥jj. Aquæ ammoniæ puræ ʒjj. For sprains and bruises.

Embroca′tio ammo′niæ aceta′tis ca′mphora′ta. ℞ solutionis saponis cum camphora, aquæ ammoniæ acetatæ sing. ℥j. Aquæ ammoniæ puræ ℥ss. For sprains and bruises. It is also frequently applied to disperse chilblains which have not suppurated. It is said to be the same as Steer's opodeldoc.

Embroca′tio ammo′niæ aceta′tis. ℞ aquæ ammoniæ acetatæ. Solutionis saponis sing. ℥j M. For bruises with inflammation.

Embroca′tio cantha′ridis cum ca′mphora. ℞ tinct. cantharidis. Spiritus camphoræ sing. ℥j M. This may be used in any case in which the object is to stimulate the skin. The absorption of cantharides, however, may bring on a strangury.

E′mbroche. See *Embrocatio.*

E′MBRYO. (From εμβρυω, to bud forth.) The *fœtus in utero* is so called before the fifth month of pregnancy, because its growth resembles that of the budding of a plant.

Embryothla′stes. (From εμβρυον, the fœtus, and θλαω, to break.) *Embryorectes.* A crotchet, or instrument for breaking the bones of a dead fœtus to promote its delivery.

EMBRYO′TOMY. (From εμβρυον, a fœtus, and τεμνω, to cut.) *Embryotomia.* The separating of any part of the fœtus whilst *in utero*, to extract it.

Embryu′lcus. (From εμβρυον, a fœtus, and ελκω, to draw.) A blunt hook, or forceps, for drawing the child from the womb.

E′merus. Scorpion senna. A laxative.

Eme′sia. (From εμεω, to vomit) *Emesma. Emesis.* The act of vomiting. Medicines which cause vomiting.

EME′TICS. (*Emetica*, sc. *medicamenta*; from εμεω, to vomit.) Substances capable of exciting vomiting, independently of any effect arising from the mere quantity of matter introduced into the stomach, or of any nauseous taste or flavour.

The susceptibility of vomiting is very different in different individuals, and is often considerably varied by disease.

Emetics are employed in many diseases.

When any morbid affection depends upon, or is connected with over distension of the stomach, or the presence of acrid, indigestible matters, vomiting gives speedy relief. Hence its utility in impaired appetite, acidity in the stomach, in intoxication, and where poisons have been swallowed.

From the pressure of the abdominal viscera in vomiting, emetics have been considered as serviceable in jaundice, arising from biliary calculi obstructing the ducts.

The expectorant power of emetics, and their utility in catarrh and phthisis, have been ascribed to a similar pressure extended to the thoracic viscera.

In the different varieties of febrile affections, much advantage is derived from exciting vomiting, especially in the very commencement of the disease. In high inflammatory fever it is considered as dangerous, and in the advanced stage of typhus it is prejudicial.

Emetics given in such doses, as only to excite nausea, have been found useful in restraining hæmorrhage.

Different species of dropsy have been cured by vomiting, from its having excited absorption. To the same effect, perhaps, is owing the dispersion of swelled testicle, bubo, and other swellings, which has occasionally resulted from this operation.

The operation of vomiting is dangerous, or hurtful, in the following cases: where there is determination of the blood to the head, especially in plethoric habits; in visceral inflammation; in the advanced stage of pregnancy; in hernia and prolapsus uteri; and wherever there exists extreme general debility. The frequent use of emetics weakens the tone of the stomach. An emetic should always be administered in the fluid form. Its operation may be promoted by drinking any tepid diluent, or bitter infusion.

The individual emetics may be arranged under two heads, those derived from the vegetable, and those from the mineral kingdom. From the vegetable kingdom are numbered ipecacuanha, scilla maritima, anthemis nobilis, sinapis alba, asarum Europæum, nicotiana tabacum. From the mineral kingdom, antimony, the sulphates of zinc and copper, and the subacetate of copper. To these may be added ammonia and its hydro-sulphuret.

Emetocatha'rticus. (From εμεω, to vomit, and καθαιρω, to purge.) Purging both by vomit and stool.

Emine'ntiæ quadrige'minæ. See *Tubercula quadrigemina*.

EMMENAGOGUES. (*Emmenagoga* sc. *medicamenta*, εμμηναγωγα: from εμμηνια, the menses, and αγω, to move.) Those medicines that possess a power of promoting that monthly discharge by the uterus, which, from a law of the animal œconomy, should take place in certain conditions of the female system. The articles belonging to this class may be referred to four orders:

1. *Stimulating emmenagogues*, as *hydrargyrite* and *antimonial preparations*, which are principally adapted for the young, and those with peculiar insensibility of the uterus.

2. *Irritating emmenagogues*, as *aloes*, *savine*, and *Spanish flies:* these are to be preferred in torpid and chlorotic habits.

3. *Tonic emmenagogues*, as *ferruginous preparations*, *cold bath*, and *exercise*, which are advantageously selected for the lax and phlegmatic.

4. *Antispasmodic emmenagogues*, as *assafœtida*, *castor*, and *pediluvia:* the constitutions to which these are more especially suited are the delicate, the weak, and the irritable.

Emme'nia. (From εν, in, and μην, a month.) The menstrual flux.

EMO'LLIENTS. (*Emollientia*, sc. *medicamenta:* from *emollio*, to soften.) Those substances which possess a power of relaxing the living and animal fibre, without producing that effect from any mechanical action. The different articles belonging to this class of medicines may be comprehended under the following orders:

1. *Humectant emollients*, as *warm water*, and *tepid vapours*, which are fitted for the robust and those in the prime of life.

2. *Relaxing emollients*, as *althæa*, *malva*, &c. These may be employed in all constitutions, while, at the same time, they do not claim a preference to others from any particular habit of body.

3. *Lubricating emollients*, as *bland oils*, *fat*, and *lard*. The same observation will hold of this order as was made of the last mentioned.

4. *Atonic emollients*, as *opium* and *pediluvia:* these are applicable to any constitution, but are to be preferred in habits where the effects of this class are required over the system in general.

Empei'ria. (From εν, and ϖειρω, to endeavour.) Professional experience.

Emphero'menus. (From εμφερω, to bear.) Urine, or other substance, which has a sediment.

Emphra'ctica. (From εμφραττω, to obstruct.) Medicines which, applied to the skin, shut up the pores.

EMPHYSE'MA. (From εμφυσαω, to inflate.) *Pneumatosis.* Air in the cellular membrane. In general it is confined to one place; but, in a few cases, it spreads universally over the whole body, and occasions a considerable degree of swelling. It sometimes arises spontaneously, which is, however, a very rare occurrence, or comes on immediately after delivery, without any evident cause; but it is most generally induced by some wound or injury done to the thorax, and which affects the lungs; in which case the air passes from these, through the wound, into the surrounding cellular membrane, and from thence spreads over the whole body.

Emphysema is attended with an evident crackling noise, and elasticity upon pressure; and sometimes with much difficulty of breathing, oppression, and anxiety.

We are to consider it as a disease by no means unattended with danger; but more probably from the causes which give rise to it, than any hazard from the complaint itself.

EMPIRIC. (*Empiricus*, εμπειρικος: from εν, in, and ϖειρα, experience.) One who practises the healing art upon experience, and not theory. This is the true meaning of the word empiric: but it is now applied, in a very opposite sense, to those who deviate from the line of conduct pursued by scientific and regular practitioners, and vend nostrums, or sound their own praise in the public papers.

Empla'stica. (From εμπλασσω, to obstruct.) Medicines which, spread upon the skin, stop the pores.

EMPLA'STRUM. (From εμπλασσω, to spread upon.) A plaster. Plasters are composed of unctuous substances, united either to powders or metallic oxides, &c. They ought to be of such a consistence as not to stick to the fingers when cold, but to become soft, so as to be spread out, in a moderate degree of heat, and in that of the human body, to continue tenacious enough to adhere to the skin. They owe their consistence either to metallic oxides, especially those of lead, or to wax, resin, &c. They are usually kept in rolls wrapped in paper, and spread, when wanted for use, upon thin leather; if the plaster be not of itself sufficiently adhesive, it is to be surrounded at its margin by a boundary of resin plaster.

Emplastrum ammoni'aci. Take of purified ammoniacum, five ounces; acetic acid, half a pint Dissolve the ammoniacum in the acid, then evaporate the liquor in an iron vessel, by means of a water-bath, constantly stirring it, until it requires a proper consistence. This plaster is now first introduced into the London Pharmacopœia; it adheres well to the skin, without irritating it, and without producing inconvenience by its smell.

EMPLASTRUM AMMONI′ACI CUM HYDRA′RGYRO. "Take of purified ammoniacum, a pound; purified mercury, three ounces; sulphurated oil, a fluid drachm." Rub the mercury with the sulphurated oil until the globules disappear; then add by degrees the ammoniacum, previously melted, and mix the whole together. This composition is said to possess resolvent virtues; and the plaster is recommended with this view to be applied to nodes, tophs, indurated glands, and tumours.

EMPLA′STRUM ASAFŒ′TIDÆ. *Emplastrum antihystericum.* Plaster of asafœtida. Take of plaster of semi-vitrified oxide of lead, asafœtida, each two parts; galbanum, yellow wax, each one part. This plaster is said to possess anodyne and antispasmodic virtues. It is, therefore, occasionally directed to be applied to the umbilical region in hysterical cases.

EMPLA′STRUM CANTHA′RIDIS. See *Emplastrum lyttæ.*

EMPLA′STRUM CE′RÆ. Wax plaster. *Emplastrum attrahens.* Take of yellow wax, prepared suet, of each three pounds; yellow resin, a pound. Melt them together and strain. This is a gently drawing preparation, calculated to promote a moderate discharge from the blistered surface, with which intention it is mostly used. Where the stronger preparations irritate, this will be found in general to agree.

EMPLA′STRUM CU′MINI. Cumin plaster. "Take of cumin-seeds, carraway-seeds, bay-berries, of each three ounces; dried pitch, three pounds; yellow wax, three ounces." Having melted the dried pitch and wax together, add the remaining articles previously powdered, and mix. A warm stomachic plaster, which, when applied to the stomach, expels flatulency. To indolent scrofulous tumours, where the object is to promote suppuration, this is an efficacious plaster.

EMPLA′STRUM GA′LBANI COMPO′SITUM. Compound Galbanum plaster, formerly called *emplastrum lithargyri compositum* and *diachylon magnum cum gummi.* Take of galbanum gum resin purified, eight ounces; lead plaster, three pounds; common turpentine, ten drachms; resin of the spruce fir, three ounces. Having melted the galbanum gum resin with the turpentine, mix in first the powdered resin of the spruce fir, and then the lead plaster, previously melted by a slow fire, and mix the whole. This plaster is used as a warm digestive and suppurative, calculated to promote maturation of indolent or scirrhous tumours, and to allay the pains of sciatica, arthrodynia, &c.

EMPLA′STRUM HYDRA′RGYRI. Mercurial plaster. *Emplastrum lithargyri cum hydrargyro.* "Take of purified mercury, three ounces; sulphurated oil, a fluid drachm; lead plaster, a pound." Rub the mercury with the sulphurated oil, until the globules disappear; then add by degrees the lead plaster, melted, and mix the whole.

EMPLA′STRUM LA′DANI COMPO′SITUM. Take of soft labdanum, three ounces; of frankincense, one ounce; cinnamon and expressed oil of mace, each half an ounce; essential oil of mint, one drachm: add to the frankincense, melted first, the labdanum a little heated, till it becomes soft, and then the oil of mace; afterwards mix in the cinnamon with the oil of mint, and beat them together into a mass, in a warm mortar, and keep it in a vessel well closed. This may be used with the same intentions as the cumin-plaster, to which it is in no way superior, though composed of more expensive materials. Formerly, it was considered as a very elegant stomach plaster, but is now disused.

EMPLASTRUM LITHA′RGYRI. See *Emplastrum plumbi.*

EMPLA′STRUM LITHA′RGYRI COMPO′SITUM. See *Emplastrum Galbani compositum.*

EMPLA′STRUM LITHA′RGYRI CUM RESI′NA. See *Emplastrum resinæ.*

EMPLA′STRUM LY′TTÆ. Blistering-fly plaster. *Emplastrum cantharidis. Emplastrum vesicatorium.* Take of blistering flies, in very fine powder, a pound; wax plaster, a pound and a half; prepared fat, a pound. Having melted the plaster and fat together, and removed them from the fire, a little before they become solid sprinkle in the blistering flies, and mix the whole together. See *Blister* and *Lyttæ.*

EMPLA′STRUM O′PII. Plaster of opium. "Take of hard opium, powdered, half an ounce; resin of the spruce fir, powdered, three ounces; lead plaster, a pound." Having melted the plaster, mix in the resin of the spruce fir and opium, and mix the whole. Opium is said to produce somewhat, though in a smaller degree, its specific effect when applied externally.

EMPLA′STRUM PI′CIS COMPO′SITUM. Compound pitch plaster. *Emplastrum picis Burgundicæ.* "Take of dried pitch, two pounds; resin of spruce fir, a pound; yellow resin, yellow wax, of each four ounces; expressed oil of nutmegs, an ounce." Having melted together the pitch, resin, and wax, add first the resin of the spruce fir, then the oil of nutmegs, and mix the whole together. From the slight degree of redness this stimulating application produces, it is adapted to gently irritate the skin, and thus relieve rheumatic pains. Applied to the temples, it is sometimes of use in pains of the head.

EMPLA′STRUM PLU′MBI. Lead plaster. *Emplastrum lithargyri. Emplastrum commune. Diachylon simplex.* "Take of semi-vitreous oxide of lead, in very fine powder, five pounds; olive oil, a gallon; water, two pints." Boil them with a slow fire, constantly stirring until the oil and litharge unite, so as to form a plaster. Excoriations of the skin, slight burns, and the like, may be covered with this plaster: but it is in more general use, as a defensive, where the skin becomes red from lying a long time on the part. This plaster is also of great importance, as forming the basis, by addition to which many other plasters are prepared.

Empla′strum resi′næ. Resin plaster. *Emplastrum adhæsivum. Emplastrum lithargyri cum resina.* "Take of yellow resin, half a pound; lead plaster, three pounds. Having melted the lead plaster over a slow fire, add the resin in powder, and mix." The adhesive, or sticking plaster, is chiefly used for keeping on other dressings, and for retaining the edges of recent wounds together.

Empla′strum sapo′nis. Soap plaster. Take of hard soap sliced, half a pound; lead plaster, three pounds. Having melted the plaster, mix in the soap; then boil it down to a proper consistence. Discutient properties are attributed to this elegant plaster, with which view it is applied to lymphatic and other indolent tumours. It forms an admirable defensive and soft application, spread on linen, to surround a fractured limb.

Empla′strum thu′ris compo′situm. Compound frankincense plaster. Take of frankincense, half a pound; dragon's blood, three ounces; litharge plaster, two pounds. To the melted lead plaster, add the rest powdered. This plaster is said to possess strengthening, as well as adhesive powers. By keeping the skin firm, it may give tone to the relaxed muscles it surrounds, but cannot, in any way, impart more strength than the common adhesive plaster.

Empneumato′sis. (From εν, in, and ϖνεω, to blow.) An inflation of the stomach, or any other viscus.

Empo′rium. (From εμπορεω, to negotiate.) A mart. The brain is so called, as being the place where all rational and sensitive transactions are collected.

E′mprion. (From εν, and ϖριων, a saw.) Serrated. An epithet of a pulse, in which the artery at different times is unequally distended.

EMPROSTHO′TONOS. (From εμπροσθεν, before, or forwards, and τεινω, to draw.) A clonic spasm of several muscles, so as to keep the body in a fixed position and bent forward. Cullen considers it as a species of tetanus. See *Tetanus.*

E′mptysis. (From εμπτυω, to spit out.) A discharge of blood from the mouth and fauces.

EMPYE′MA. (From εν, within, and ϖυον, pus.) A collection of pus in the cavity of the thorax. It is one of the terminations of pleuritis. There is reason for believing that matter is contained in the cavity of the chest, when, after a pleurisy, or inflammation in the thorax, the patient has a difficulty of breathing, particularly on lying on the side opposite the affected one; and when an œdematous swelling is externally perceptible.

Empye′mata. (From εν, and ϖυον, pus.) Suppurating medicines.

EMPYREU′MA. (From εμπυρευω, to kindle, from πυρ, fire.) The offensive smell that distilled waters and other substances receive from being exposed too much to fire.

EMPYREUMA′TIC. (*Empyreumatica*; from εμπυρευω, to kindle.) Smelling as it were burnt; thus empyreumatic oils are those distilled with a great heat, and impregnated with a smell of the fire.

EMU′LGENT. (*Emulgentia*; from *emulgeo*, to melt out; applied to the arteries and veins which go from the aorta and vena cava to the kidneys, because the antients supposed they strained, and, as it were, milked the serum through the kidneys.) The vessels of the kidneys are so termed. The emulgent artery is a branch of the aorta. The emulgent vein evacuates its blood into the ascending cava.

Emu′lsio amy′gdalæ commu′nis. Almond emulsion. Take of almonds, one ounce; water, two pounds and a half. Beat the blanched almonds in a stone mortar, gradually pouring on them the water; then strain off the liquor. It possesses cooling and demulcent properties.

Emu′lsio ara′bica. This is made in the same manner as the almond emulsion, only adding while beating the almonds, two ounces of gum arabic. This cooling and demulcent emulsion, ordered in the Edinburgh Pharmacopœia, may be drank ad libitum to mitigate ardor urinæ, whether from the venereal virus or any other cause. In difficult and painful micturition, and strangury, it is of infinite service.

Emu′lsio camphora′ta. "Take of camphor, one scruple; sweet almonds, blanched, two drachms; double refined sugar, one drachm; water, six ounces." This is to be made in the same manner as the common emulsion. It is calculated for the stomachs of those who can only bear small quantities of camphire.

EMU′LSION. (*Emulsio*; from *emulgeo*, to milk.) A soft and somewhat oily medicine, resembling milk.

Emulsion, almond. See *Emulsio amygdalæ communis.*

Emulsion, Arabic. See *Emulsio arabica.*

Emulsion, camphorated. See *Emulsio camphorata.*

Emulsion of asafœtida. See *Mistura asafœtidæ.*

Emulsion of gum-ammoniac. See *Mistura ammoniaci.*

EMU′NCTORY. (From *emungo*, to drain off.) The excretory ducts of the body are so termed; thus the exhaling arteries of the skin constitute the great emunctory of the body.

ENÆ′MA. (From *εν*, and *αιμα*, blood.) *Enæmos.* So Hippocrates and Galen call such topical medicines as are appropriated to bleeding wounds.

ENÆORE′MA. (From *εν*, and *αιωρεω*, to lift up.) The pendulous substance which floats in the middle of the urine.

ENA′MEL. See *Teeth.*

ENANTHE′SIS. (From *εν*, and *ανταω*, to meet.) The near approach of ascending and descending vessels.

ENARTHRO′SIS. (From *εν*, in, and *αρθρον*, a joint.) The ball and socket-joint. A species of diarthrosis, or moveable connection of bones, in which the round head of one is received into the deeper cavity of another, so as to admit of motion in every direction; as the head of the os femoris with the acetabulum of the os innominatum. See *Articulation.*

ENCA′NTHIS. (From *εν*, and *κανθος*, the angle of the eye.) A disease of the caruncula lachrymalis, of which there are two species. *Encanthis benigna*, and *Encanthis maligna seu inveterata.*

The encanthis, at its commencement, is nothing more than a small, soft, red, and sometimes rather livid excrescence, which grows from the caruncula lachrymalis, and, at the same time from the neighbouring semilunar fold of the conjunctiva. This excrescence on its first appearance, is commonly granulated, like a mulberry, or is of a ragged and fringed structure. Afterwards, when it has acquired a certain size, one part of it represents a granulated tumour, while the rest appears like a smooth, whitish, or ash-coloured substance, streaked with varicose vessels, sometimes advancing as far over the conjunctiva, covering the side of the eye next to the nose, as where the cornea and sclerotica unite.

The encanthis keeps up a chronic ophthalmy, impedes the action of the eyelids, and prevents, in particular, the complete closure of the eye. Besides, partly by compressing and partly by displacing the orifices of the puncta lachrymalia, it obstructs the free passage of the tears into the nose. The inveterate encanthis is ordinarily of a very considerable magnitude; its roots extend beyond the caruncula lachrymalis and semilunar fold to the membranous lining of one or both eyelids. The patient experiences very serious inconvenience from its origin and interposition between the commissure of the eyelids, which it necessarily keeps asunder on the side towards the nose. Sometimes the disease assumes a cancerous malignancy. This character is evinced by the dull red, and, as it were, leaden colour of the excrescence; by its exceeding hardness, and the lancinating pains which occur in it, and extend to the forehead, the whole eye-ball and the temple, especially when the tumour has been, though slightly, touched. It is also shewn, by the propensity of the excrescence to bleed, by the partial ulcerations on its surface, which emit a fungous substance, and a thin and exceedingly acrid discharge.

ENCATALE′PSIS. (From *εν*, and *καταλαμβανω*, to seize.) A catalepsy.

ENCATHI′SMA. (From *εν*, and *καθιζω*, to sit in.) A semicupium. A bath for half the body.

ENCAU′MA. (From *εν*, in, and *καιω*, to burn.) *Encausis.* A pustule produced from a burn.

ENCAU′SIS. (From *εν*, and *καιω*, to burn.) A burn or scald.

ENCEPHALOCE′LE. (From *εγκεφαλον*, the brain, and *κηλη*, a tumour.) A rupture of the brain.

ENCE′PHALON. (From *εν*, in, and *κεφαλη*, the head.) *Encephalum.* By some writers the cerebrum only is so called; and others express by this term the contents of the cranium.

ENCE′RIS. (From *εν*, and *κηρος*, wax.) A roll of wax for making plasters.

ENCERO′SIS. (From *εν*, and *κηροω*, to wax.) The covering of a plaster with wax.

ENCHARA′XIS. (From *εν*, and *χαρασσω*, to scarify.) A scarification.

ENCHEIRE′SIS. (From *εν*, and *χειρ*, the hand.) *Encheiria.* Galen uses this word as a part of the title to one of his works, which treats of dissection. The word imports the manual treatment of any subject.

ENCHEI′RIA. See *Encheiresis.*

ENCHILO′MA. See *Enchyloma.*

ENCHO′NDRUS. (From *εν*, and *χονδρος*, a cartilage.) A cartilage.

ENCHRI′STA. (From *εγχριω*, to anoint.) Unguents. Ointments.

ENCHYLO′MA. (From *εν*, and *χυλος*, juice.) An inspissated juice. An elixir, according to Lemery.

E′NCHYMA. (From *εν*, and *χεω*, to infuse.) An infusion. A sanguineous plethora.

ENCHY′MATA. (From *εγχυω*, to infuse.) Injections for the eyes and ears.

ENCHYMO′MA. (From *εν*, and *χυω*, to pour in.) In the writings of the antient physicians, it is a word by which they express that sudden effusion of blood into the cutaneous vessels, which arises from joy, anger, or shame; and in the last instance is what we usually call blushing.

ENCHYMO′SIS. (*Ἐγχυμωσις.*) Blushing; also an extravastation of blood, which makes the part appear livid. Thus, but improperly, it is synonymous with *Ecchymosis.*

E′NCHYSIS. See *Enchyma.*

ENCLY′SMA. (From *εν*, and *κλυζω*, to cleanse out.) A clyster.

ENCŒ′LIUM. (From *εν*, within, and *κοιλια*, the belly.) The abdominal viscera.

Encolpi′smus. (From εγκολπεω, to insinuate.) An uterine injection.

Encra′nium. (From εν, within, and κρανιον, the skull.) The cerebrum; the whole contents of the skull.

Encrasi′cholus. (From εν, in, κερας, the head, and χολη, bile; because it is said to have the gall in its head.) The anchovy.

E′ncris. Εγκρις. A cake of meal, oil, and honey.

E′ncymon. (From εν, and κυω, to conceive.) Pregnancy.

E′ncysis. (From εν, and κυω, to bring forth.) Parturition.

ENCY′STED. A term applied to those tumours which consist of a fluid or other matter, enclosed in a sac or cyst.

Ency′stis. (From εν, in, and κυστις, a bag.) A wen. A hard tumour.

ENDE′MIC. (*Endemicus*; from εν, in, and δημος, people.) A disease is so termed that is peculiar to a certain class of persons, or country; thus struma is endemial to the inhabitants of Derbyshire and the Alps; scurvy to seafaring people; and the plica polonica is met with in Poland.

E′ndesis. (From εν, and δεω, to tie up.) A ligature. A bandage.

Endive. See *Cichorium.*

ENDI′VIA. (*Quasi eundo viâ, quia passim nascitur*; named from the quickness of its growth.) See *Cichorium.*

E′ndosis. (From εν, and διδωμι, to give.) A remission, particularly of febrile disorders.

Enella′gmenus. (From εναλλαττω, to interchange.) An epithet applied to the union of the joints of the vertebræ.

E′NEMA. (*Enema, -matis*, neut. from ενιημι, to inject.) Injection. A clyster. A well-known form of conveying both nourishment and medicine to the system, under certain morbid circumstances. The former takes place where obstruction of the passage to the stomach is so great as to render access to that organ impossible, such as occurs in lock-jaw, diseased œsophagus, &c. By these means the body can be supported for a few weeks, while an attempt is made at effecting a cure. It is composed, in such cases, of animal broths, gruels made of farinaceous seeds, mucilages, &c. As a form of medicine, clysters are no less useful; and, according to the intention with which they are prescribed, they are either of an emollient, anodyne, or purgative nature. The following forms are in general use.

E′nema ano′dynum. Take of starch jelly, half a pint; tincture of opium, forty to sixty drops. Mix. The whole to be injected by means of a pewter clyster-syringe, in cases of dysentery or violent purging, and pain in the bowels.

E′nema antispasmo′dicum. Take of tinct. of assafœtida, half an ounce; tincture of opium, forty drops, gruel, half a pint. Mix. For spasmodic affections of the bowels.

E′nema laxati′vum. Take of Epsom salt, two ounces; dissolve in three quarters of a pint of warm gruel, or broth, with an ounce of fresh butter, or sweet oil.

E′nema nicotia′næ. Take of the infusion of tobacco from a half to a whole pint. Employed in cases of strangulated hernia

E′nema nu′triens. Take of strong beef tea, twelve ounces; thicken with hartshorn shavings, or arrow root.

E′nema Terebi′nthinæ. Take of common turpentine, half an ounce; the yolk of one egg, and half a pint of gruel. The turpentine being first incorporated with the egg, add to them the gruel. This clyster is generally used, and with great good effect, in violent fits of the stone.

Enerei′sis. (From ενερειδω, to adhere to.) A compression. A tight ligature.

E′NERGY. (*Energia*; from ενεργεω, to act.) Action. The degree of force exercised by any power: thus, nervous energy, muscular energy, &c.

Eneure′sis. See *Enuresis.*

Engala′ctum. (From εν, and γαλα, milk; so called because it is eaten by nurses to increase their milk.) The herb saltwort.

Engastrimy′thus. (From εν, in, γαστηρ, the belly, and μυθεομαι, to discourse.) A ventriloquist; one who appears to speak from his belly.

Engiso′ma. (From εγγιζω, to approach.) *Camarosis.* An instrument for making the parts of the broken clavicle meet. Also a fracture of the cranium.

English Mercury. See *Mercurialis.*

Englotto-ga′stor. (From εν, γλωττη, the tongue, and γαστηρ, the belly.) A ventriloquist.

Engompho′sis. (From εν, and γομφος, a nail.) That species of articulation which resembles a nail, driven into wood, as a tooth in its socket.

Engo′nios. (From εν, and γωνια, an angle.) The flexure, or angle made by the bending of a joint.

Enixum Parace′lsi. The caput mortuum of the distillation of nitric acid, or supersulphate of potash.

Enneapha′rmacum. (From εννεα, nine, and φαρμακον, a medicine) A medicine composed of nine simple ingredients.

Enneaphy′llum. (From εννεα, nine, and φυλλον, a leaf; because its flower consists of nine leaves.) A name for hellebo-raster, or bear's foot.

Enry′thmus. (From εν, and ῥυθμος, number.) A pulse in some respect regular.

Ens ma′rtis. A name antiently given to the oxide of iron, which arises in sublimation, with twice its quantity of sal-ammoniac. Medical practice does not at present place this preparation in a higher rank of estimation than other oxydes of iron.

Ens pri′mum sola′re. Antimony.

Ens ve′neris. The ens martis is in many dispensatories called by this name.

E′NSIFORM. (*Ensiformis*, sc. *cartilago;* from *ensis*, a sword, and *forma*, resemblance.) Sword-like. A term applied to a cartilage. See *Cartilago ensiformis.*

Ensta′ctum. (Fom εν, and σταζω, to instill.) A liquid medicine, which is applied stillatim, or drop by drop.

Enta′tica. (From εντεινω, to strain.) Provocatives: medicines which excite venereal inclination.

E′ntera. (From εντος, within.) The bowels. Hippocrates calls by this name the bags in which were formerly enclosed medicines for fomentations.

Enterade′nes. (From εντερον, an intestine, and αδην, a gland.) The intestinal glands.

Entere′nchyta. (From εντερα, the bowels, and εγχυω, to infuse into.) An instrument for administering clysters. A clyster-pipe.

ENTERI′TIS (Εντεριτις; from εντερον, an intestine.) Inflammation of the intestines. It is a genus of disease in the class *pyrexiæ*, and order *phlegmasiæ* of Cullen, and is known by the presence of pyrexia, fixed pain in the abdomen, costiveness, and vomiting. The causes of enteritis are much the same as those of gastritis, being occasioned by acrid substances, indurated fæces, long continued and obstinate costiveness, spasmodic colic, and a strangulation of any part of the intestinal canal; but another very general cause is the application of cold to the lower extremities, or to the belly itself. It is a disease which is most apt to occur at an advanced period of life, and is very liable to a relapse.

It comes on with an acute pain, extending in general over the whole of the abdomen; but more especially round the navel, accompanied with eructations, sickness at the stomach, a vomiting of bilious matter, obstinate costiveness, thirst, heat, great anxiety, and a quick and hard small pulse. After a short time, the pain becomes more severe, the bowels seem drawn together by a kind of spasm, the whole region of the abdomen is highly painful to the touch, and seems drawn together in lumpy contractions; invincible costiveness prevails, and the urine is voided with great difficulty and pain.

The inflammation continuing to proceed with violence, terminates at last in gangrene; or abating gradually, it goes off by resolution.

Enteritis is always attended with considerable danger, as it often terminates in gangrene in the space of a few hours from its commencement; which event is marked by the sudden remission of pain, sinking of the pulse, shrinking of the features, and distention of the belly; and it frequently proves fatal likewise, during the inflammatory stage. If the pains abate gradually, if natural stools be passed, if an universal sweat, attended with a firm equal pulse, comes on, or if a copious discharge of loaded urine, with the same kind of pulse, takes place, a resolution and favourable termination may be expected.

Dissections of this disease shew that the inflammation pervades the intestinal tube to a very considerable extent; that adhesions of the diseased portion to contiguous parts are formed; and that, in some cases, the intestines are in a gangrenous state, or that ulcerations have formed. They likewise shew that, besides obstinate obstructions, intrsusception, constrictions, and twistings, are often to be met with; and that, in most cases, the peritoneum is more or less affected, and is perceived, at times, to be covered with a layer of coagulable lymph. The treatment must be begun by taking blood freely from the arm, as far as the strength of the patient will allow: but the disease occurring more frequently in persons rather advanced in years, and of a constitution somewhat impaired, it becomes more important to limit this evacuation, and rely in a great measure on the effect of a number of leeches, applied to the abdomen. Another very useful step is to put the patient into a hot bath, which may presently induce faintness; or where this cannot be procured, fomenting the abdomen assidously. When the symptoms are thus materially relieved, an ample blister should be applied. It becomes also of the first importance to clear out the bowels: a copious laxative clyster will evacuate the inferior part of the canal, and solicit the peristaltic motion downwards; and the milder cathartics, as castor oil, neutral salts, &c. in divided doses, may gradually procure a passage. But where the disease has been preceded by costiveness, more active articles will probably be necessary, as calomel, compound extract of colocynth, infusion of senna, with salts, &c. If the stomach be irritable, the effervescing saline draught may enable it to retain the requisite cathartics. Another plan, often very successful, is giving opium in a full dose, particularly in conjunction with calomel, taking care to follow it up by some of the remedies above mentioned, till the bowels are relieved; which effect it appears to promote by its soothing antispasmodic power. Afterwards we may endeavour to keep up diaphoresis, and recruit the strength of the patient by a mild nourishing diet; taking care to guard against accumulation of fæces, exposure to cold, or any thing else likely to occasion a relapse.

ENTEROCE′LE. (From εντερον, an intestine, and κηλη, a tumour.) *Hernia intestinalis.* Every hernia may be so called that is produced by the protrusion of a portion of intestine, whether it is in the groin, navel, or elsewhere.

ENTERO-EPIPLOCE′LE. (From εντερον, an intestine, επιπλοον, the epiploon, and κηλη, a tumour.) A rupture formed by the protrusion of part of an intestine, with a portion of the epiploon.

ENTERO-HYDROCE′LE. (From εντερον, an intestine, υδωρ, water, and κηλη, a tumour.) This must mean a common scrotal hernia, with a good deal of water in the hernial sac; or else a hernia congenita, (in which the bowels descend into the tunica vaginalis testis,) attended with a collection of fluid in the cavity of this membrane.

ENTERO′MPHALUS. (From εντερον, an intestine, and ομφαλος, the navel.) An umbilical hernia, produced by the protrusion of a portion of intestine.

ENTERO′PHYTUM. (From εντερον, an intestine, and φυτον, a plant.) The sea-chitterling; a plant which grows in the form of a gut.

ENTERORA′PHIA. (From εντερον, an intestine, and ραφη, a suture.) A suture of the intestines, or the sewing together the divided edges of an intestine.

Enteroschеoce′le. (From εντερον, an intestine, οσχεον, the scrotum, and κηλη, a rupture.) *Hernia scrotalis*, or rupture of the intestines into the scrotum.

Enthe′mata. (From εντιθημι, to put in.) Anti-inflammatory styptics.

E′nthlasis. A contusion with the impression of the instrument by which it happened.

ENTRO′PIUM. (From εν, and τρεπω, to turn.) A disease of the eyelids, occasioned by the eyelashes and eyelid being inverted towards the bulb of the eye.

Entypo′sis. (From εντυποω, to make an impression.) The acetabulum, or concave bone of the shoulder.

E′NULA CAMPA′NA. (A corruption of *henula*, or *Helenium*, from *Helene*, the island where it grew.) See *Inula Helenium*.

Enu′lon. (From εν, and ουλον, the gums.) The internal flesh of the gums, or that part of them which is within the mouth.

ENURE′SIS. (From ενουρεω, to make water.) An incontinency or involuntary flow of urine. This disease usually proceeds either from relaxation or a paralytic affection of the sphincter of the bladder, induced by various debilitating causes, as too free a use of spirituous liquors, manustupration, and excess in venery; or it arises from compression on the bladder, from a diseased state of the organ, or from some irritating substance contained in its cavity. It is arranged in the class *locales*, and order *apocenoses* of Cullen, and contains two species: — 1. *Enuresis atonica*, the sphincter of the bladder having lost its tone from some previous disease: 2. *Enuresis ab irritatione, vel compressione vesicæ*, from an irritation or compression of the bladder.

Epacma′sticus. (From επι, and ακμαζω, to increase.) It is applied to fever which is still increasing in malignity.

Epa′cme. (From επακμαζω, to increase.) The increase, or exacerbation of a disease.

Epago′gium. (From επαγω, to draw over.) The præpuce, that part of the penis which is drawn over the glans, according to Dioscorides.

Epanadido′ntes. (From επαναδιδωμι, to increase.) A term applied to fevers which continue to increase in their degree of heat.

Epanadiplo′sis. (From επαναδιπλοω, to reduplicate.) The reduplication of a fit of a semitertian fever; that is, the return of the cold fit before the hot fit is ended.

Epana′stasis. (From επι, and ανιϛημι, to excite.) A tubercle, or small pustule upon the skin.

Epancylo′tus. (From επι, and αγκυλος, crooked.) A sort of crooked bandage in Oribasius.

Epa′rma. (From επαιρω, to elevate.) *Eparsis*. Any kind of tumour, but frequently applied to the parotis.

Epa′rsis. See *Eparma*.

Epasma′stica fe′bris. A fever is so called by Bellini, and others, while it is in its increase.

Epe′ncranis. (From επι, ἐν, in, and κρανιον, the skull.) The name of the cerebellum.

Ephebæ′um. (From επι, and ηϐη, the groin.) The hair upon the pubes.

E′phedra. (From εφεζομαι, to sit upon.) *Ephedrana*. The buttocks. Also a species of horse-tail.

Ephe′drana. See *Ephedra*.

Ephe′lcis. (From επι, upon, and ελκος, an ulcer.) The crust of an ulcer; hardened purulent expectoration.

EPHE′LIS. (From επι, and ηλιος, the sun.) A broad, solitary, or aggregated spot, attacking most commonly the face, back of the hand, and breast, from exposure to the sun.

EPHE′MERA. (From επι, upon, and ημερα, a day.) A fever which begins, is perfectly formed, and runs through its course in the space of twelve hours.

EPHEME′RIDES. (From εφημερις, an almanack; so called because, like the moon's age, they may be foretold by the almanack.) Diseases which return at particular times of the moon.

Ephia′ltes. (From εφαλλομαι, to leap upon; so called because it was thought a dæmon leaped upon the breast.) Incubus, or night-mare.

Ephia′ltia. (From *ephialtes*, the night-mare; so called because it was said to cure the night-mare.) The herb peony.

EPHIDRO′SIS. (From εφιδροω, to perspire.) *Sudatio*. *Mador*. A violent and morbid perspiration. A genus of disease in the class *locales*, and order *apocenoses* of Cullen.

EPHI′PPIUM. (A saddle, which it is thought to resemble.) See *Sella turcica.*

E′phodos. (From επι, and οδος, a way.) In Hippocrates it hath three significations: 1. The ducts or passages, by which the excrements of the body are evacuated. 2. The periodical attack of a fever, from the common use of it to express the attack of thieves. 3. The access of similar or dissimilar things, which may be useful or hurtful to the body.

Epia′ltes. See *Ephialtes.*

Epi′alus. (From ηπιον, gently, and αλεαζω, to heat.) *Epialos.* An ardent fever, in which both heat and cold are felt in the same part at the same time. Galen defines it to be a fever in which the patient labours under a preternatural heat and a coldness at the same time. The antient Latins call it *Quercera.*

Epi′bole. (From επιϐαλλω, to press upon.) The night-mare, or ephialtes.

Epica′nthis. (From επι, and κανθος, the angle of the eye.) The angle of the eye.

Epica′rpium. (From επι, upon, and καρπος, the wrist.) A topical medicine applied to the wrist.

Epica′uma. (From επι, and καιω, to burn.) *Encauma. Epicausis.* A burn, or scald.

Epicau′sis. See *Epicauma.*

Epi′ceras. (From επι, and κερας, a horn; so called because its pods are shaped like a horn.) The herb fænugreek.

Epicera′stica. (From επι, and κεραννυμι, to mix.) Medicines which, by mixing with acrimonious juices, temper them and render them less troublesome. Emollients.

Epicheire′sis. (From επι, and χειρ, the hand.) A manual operation.

Epi′cholus. (From επι, and χολη, the bile.) Bilious.

Epicho′rdis. (From επι, upon, and χορδη, a gut.) The mesentery.

Epicho′rios. (From επι, upon, and χορα, a region.) The same as epidermis.

Epicœ′lis. (From επι, upon, and κοιλις, the eyelid.) The upper eyelid.

Epico′lic. (*Epicolica;* from επι, upon, and κωλον, the colon.) Upon the colon. That part of the abdomen which lies over the head of the cœcum and the sigmoid flexure of the colon, called the epicolic region.

Epicopho′sis. (From επι, and κωφος, deaf.) A total deafness.

EPICRA′NIUM. (From επι, and κρανιον, the cranium.) The common integuments, aponeurosis, and muscular expansion which lie upon the cranium.

Epicra′nius. See *Occipito-frontalis.*

Epi′crasis. (From επι, and κεραννυμι, to temper.) A critical evacuation of bad humours, an attemperation of bad ones. When a cure is performed in the alterative way, it is called *per Epicrasin.*

Epi′crisis. (From επι, and κρινω, to judge from.) A judgment of the termination of a disease from present symptoms.

Epicte′nium. (From επι, about, and κλεις, the pubes.) The parts above and about the pubes.

Epicye′ma. (From επι, upon, and κυω, to conceive.) *Epicycsis.* Superfœtation. Superimpregnation.

Epicye′sis. See *Epicyema.*

EPIDE′MIC. (*Epidemicus;* from επι, upon, and δημος, the people.) A contagious disease is so termed, that attacks many people at the same season, and in the same place; thus putrid fever, plague, dysentery, &c. are often epidemic.

EPIDE′NDRUM. (From επι, upon, and δενδρον, a tree; because all this genus of plants grow parasitically on the trunk or branches of trees.) The name of a genus of plants in the Linnæan system. Class, *Gynandria.* Order, *Monandria.*

Epide′ndrum vani′lla. The systematic name of the vanelloe plant. *Vanilla. Banilia. Banilas. Aracus aromaticus.* The vanelloe is a long, flattish pod, containing, under a wrinkled brittle shell, a reddish brown pulp, with small shining black seeds. The plant which affords this fruit is the *Epidendrum vanilla; scandens, foliis ovato oblongis nervosis sessilibus caulinis, cirrhis spiralibus* of Linnæus. Vanelloes have an unctuous aromatic taste, and a fragrant smell like that of some of the finer balsams heightened with musk. Although chiefly used as perfumes, they are said to possess aphrodisiac virtues.

Epi′deris. (From επι, and δερας, the skin.) The clitoris.

EPIDE′RMIS. (From επι, upon, and δερμα, the true skin.) The scarf-skin. See *Cuticle.*

Epi′desis. (From επι, upon, and δεω, to bind.) A bandage to stop a discharge of blood.

Epide′smus. (From επι, upon, and δεω, to bind.) A bandage by which splints, bolsters, &c. are secured.

EPIDI′DYMIS. (From επι, upon, and διδυμος, a testicle.) A hard, vascular, oblong substance, that lies upon the testicle, formed of a convolution of the *vas deferens.* It has a thick end, which is convex, and situated posteriorly; and a thin end, which is rather flat, and situated inferiorly. The epididymis adheres to the testicle, by its two extremities only, for its middle part is free, forming a bag, to which the tunica vaginalis of the testicle is attached.

Epi′dosis. (From επιδιδωμι, to grow upon.) A preternatural enlargement of any part.

Epi′drome. (From επιδρεμω, to run upon.) An afflux of humours.

EPIGA′STRIC. (*Epigastricus,* επιγαστρικος; from επι, upon, or above, and γαστηρ, the stomach.) That part of the abdomen that lies over the stomach, is called the epigastric region; it reaches from the pit of the stomach to an imaginary line above the navel, supposed to be drawn from one extremity of the last of the false ribs to the other. Its sides are called hypochondria, and are covered by the false ribs, between which lies the epigastrium.

EPIGA'STRIUM. (From επι, upon, or above, and γαστηρ, the belly.) The region or part immediately over the stomach.

Epigenne'ma. (From επιγινομαι, to generate upon.) *Epigenesis.* The fur on the tongue. An accessory symptom.

Epigenne'sis. See *Epigennema.*

Epigino'mena. (From επιγινομαι, to succeed or supervene.) Galen says, they are those symptoms which naturally succeed, or may be expected in the progress of a disease; but Foësius says, they are accessions of some other affection to diseases, which never happen but in stubborn and malignant diseases.

Epiglo'ssum. (From επι, upon, and γλωσσα, the tongue; so called because a lesser leaf grows above the larger in the shape of a tongue.) The Alexandrian laurel.

EPIGLO'TTIS. (From επι, upon, and γλωττις, the tongue.) The cartilage at the root of the tongue that falls upon the glottis or superior opening of the larynx. Its figure is nearly oval; it is concave posteriorly, and convex anteriorly. Its apex or superior extremity is loose, and is always elevated upwards by its own elasticity. While the back of the tongue is drawn backwards in swallowing, the epiglottis is put over the aperture of the larynx, hence it shuts up the passage from the mouth into the larynx. The base of the epiglottis is fixed to the thyroid cartilage, the os hyoides, and the base of the tongue, by a strong ligament.

Epiglo'ttum. (From επιγλωττις, the epiglottis, which it resembles in shape.) An instrument mentioned by Paracelsus for elevating the eyelids.

Epiglou'tis. (From επι, upon, and γλουτος, the buttocks.) The superior parts of the buttocks.

Epigo'natis. (From επι, upon, and γονυ, the knee.) The patella or knee-pan.

Epigo'nides. (From επι, and γονυ, the knee.) The muscles inserted into the knees.

Epi'gonum. (From επιγινομαι, to proceed upon.) A superfœtation.

Epile'mpsis. See *Epilepsy.*

Epile'ntia. Corrupted from epilepsia.

EPILEPSY. (From επιλαμβανω, to seize upon; so called, from the suddenness of its attack.) It is also called falling sickness, from the patient suddenly falling to the ground on an attack of this disease. By the antients it was termed, from its affecting the mind, the most noble part of the rational creature, the sacred disease. It consists of convulsions with sleep, and usually froth issuing from the mouth. It is a genus of disease in the class *neuroses*, and order *spasmi* of Cullen, and contains three species: 1. *Epilepsia cerebralis;* attacking suddenly without manifest cause, and not preceded by any unpleasant sensation, unless perhaps some giddiness or dimness of sight. 2. *Epilepsia sympathica;* without manifest cause, but preceded by a sensation of an aura ascending from some part of the body to the head. 3. *Epilepsia occasionalis;* arising from manifest irritation, and ceasing on the removal of this. The last comprehends several varieties:

1. *Epilepsia traumatica,* arising from an injury of the head: 2. *Epilepsia à dolore,* from pain: 3. *Epilepsia verminosa,* from the irritation of worms: 4. *Epilepsia à veneno,* from poisons: 5. *Epilepsia exanthematica,* from the repulsion of cutaneous eruptions: 6. *Epilepsia à cruditate ventriculi,* from crudities of the stomach: 7. *Epilepsia ab inanitione,* from debility: 8. *Epilepsia uterina,* from hysterical affections: 9. *Epilepsia ex onanismo,* from onanism, &c.

Epilepsy attacks by fits, and after a certain duration goes off, leaving the person most commonly in his usual state; but sometimes a considerable degree of stupor and weakness remain behind, particularly where the disease has frequent recurrences. It is oftener met with among children than grown persons, and boys seem more subject to its attacks than girls. Its returns are periodical, and its paroxysms commence more frequently in the night than in the day, being somewhat connected with sleep. It is a disease sometimes counterfeited, in order to extort charity or excite compassion.

Epilepsy is properly distinguished into sympathic and idiopathic, being considered as sympathic, when produced by an affection in some other part of the body, such as acidities in the stomach, worms, teething, &c. as idiopathic when it is a primary disease, neither dependent on nor proceeding from any other.

The causes which give rise to epilepsy, are blows, wounds, fractures, and other injuries, done to the head by external violence, together with lodgments of water in the brain, tumours, concretions and polypi. Violent affections of the nervous system, sudden frights, fits of passion, great emotions of the mind, acute pains in any part, worms in the stomach or intestines, teething, the suppression of long accustomed evacuations, too great emptiness or repletion, and poisons received into the body, are causes which likewise produce epilepsy. Sometimes it is hereditary, and at others it depends on a predisposition arising from a mobility of the sensorium, which is occasioned either by plethora, or a state of debility.

An attack of epilepsy is now and then preceded by a heavy pain in the head, dimness of sight, noise in the ears, palpitations, flatulency in the stomach and intestines, weariness, and a small degree of stupor, and in some cases, there prevails a sense of something like a cold vapour or aura arising up to the head; but it more generally happens that the patient falls down suddenly without much previous notice; his eyes are distorted or turned so that only the whites of them can be seen; his fingers are closely clinched, and the trunk of his body particularly, on one side, is much agitated; he foams at the mouth, and thrusts out his tongue, which often suffers great injury from the muscles of the lower jaw being affected; he loses all sense of feeling, and not unfrequently voids both urine and fæces involuntarily.

The spasms abating he recovers gradually; but on coming to himself feels very languid and exhausted, and retains not the smallest recollection of what has passed during the fit.

When the disease arises from an hereditary disposition, or comes on after the age of puberty, or where the fits recur frequently, and are of long duration, it will be very difficult to effect a cure: but when its attacks are at an early age, and occasioned by worms, or any accidental cause, it may in general be removed with ease. In some cases, it has been entirely carried off by the occurrence of a fever, or by the appearance of a cutaneous eruption. It has been known to terminate in apoplexy, and in some instances to produce a loss of the powers of the mind, and to bring on idiotism.

The appearances usually to be observed on dissection, are serous and sanguineous effusion, a turgid tense state of the vessels of the brain without any effusion, a dilatation of some particular part of the brain, excrescences, polypi, and hydatids adhering to it, and obstructing its functions, and likewise ulcerations.

During the epileptic paroxysm in general, little or nothing is to be done, except using precautions, that the patient may not injure himself; and it will be prudent to remove any thing which may compress the veins of the neck, to obviate congestion in the head. Should there be a considerable determination of blood to this part, or the patient very plethoric, it may be proper, if you can keep him steady, to open a vein, or the temporal artery; and in weakly constitutions the most powerful antispasmodics might be tried in the form of clyster, as they could hardly be swallowed: but there is very seldom time for such measures. In the intervals the treatment consists: 1. In obviating the several exciting causes: 2. In correcting any observable predisposition: 3. In the use of those means, which are most likely to break through the habit of recurrence.

I. The manner of fulfilling the first indication requires little explanation: after an injury to the head, or where there is disease of the bone, an operation may be necessary, to remove irritation from the brain; in children teething, the gums ought to be lanced: where the bowels are foul or worms suspected, active purgatives should be exhibited, &c. In those instances, in which the aura epileptica is perceived, it has been recommended to destroy the part, where it originates, or divide the nerve going to it, or correct the morbid action by a blister, &c.; such means would certainly be proper when there is any disease discoverable in it. Making a tight ligature on the limb above has sometimes prevented a fit; but perhaps only through the medium of the imagination.

II. Where a plethoric state appears to lay the foundation of the disease, which is often the case, the patient must be restricted to a low diet, frequent purges exhibited, and the other excretions kept up, and he should take regular moderate exercise, avoiding whatever may determine the blood to the head; and to counteract such a tendency, occasional cupping, blisters, issues, &c. may be useful, as well as the shower bath; but in urgent circumstances, the lancet ought to be freely used. If on the contrary, there are marks of inanition and debility, a generous diet, with tonic medicines, and other means of strengthening the system, will be proper. The vegetable tonics have not been so successful in this disease as the metallic preparations, particularly the sulphate of zinc, the nitrate of silver, and the ammoniated copper, but this cannot perhaps be so safely persevered in; where the patient is remarkably exsanguious, chalybeates may answer better; and in obstinate cases the arsenical solution might have a cautious trial. In irritable constitutions sedatives are indicated, as digitalis, opium, &c.: but the free use of opium is restricted by a tendency to congestion in the head. Where syphilis appears to be concerned, a course of mercury is proper; in scrophulous habits, bark, with soda and sea-bathing; and so on.

III. The third division of remedies comes especially in use, where the fits are frequent, or where their recurrence can be anticipated: emetics will often prevent them, or a full dose of opium; also other powerful antispasmodics, as æther, musk, valerian, &c.: or strong odours, and in short any thing producing a considerable impression on the system. Bark taken largely might perhaps be more successful on this principle. The disease has sometimes been cured, especially when originating from sympathy, by inspiring fear or horror; and many frivolous charms may no doubt have taken effect through the medium of the imagination.

Also long voyages have removed it, which might especially be hoped for at the age of puberty, particularly if a considerable change in the mode of life were made in other respects; those who had lived indolently being obliged to exert themselves, the diet properly adapted to the state of the system, &c.

EPILO′BIUM. (From επι λοβου ιον, a violet or beautiful flower, growing on a pod.) The name of a genus of plants in the Linnæan system. Class, *Octandria*. Order, *Monogynia*.

Epilo′bium angustifo′lium. Rose-bay-willow herb. The young tender shoots cut in the spring, and dressed as asparagus, are little inferior to it.

Epime′dium. The plant barren-wort.

Epimo′rius. (From επι, and μειρω, to divide.) A term applied to an unequal pulse.

Epimy′lis. (From επι, and μυλη, the knee.) The patella or knee bone.

Epineneu′cus. (From επινευω, to nod or incline.) An unequal pulse.

Epino′tium. (From επι, upon, and νωτος, the back.) The shoulder blade.

Epiny′ctis. (From επι, and νυξ, night.) A pustule, which rises in the night, forming an angry tumour on the skin of the arms, hands, and thighs, of the size of a lupine, of a dusky red, and sometimes of a livid and pale colour, with great inflammation and pain. In a few days it breaks, and sloughs away.

Epipa′ctis. (From επιπακτοω, to coagulate.) A plant mentioned by Dioscorides; and so named because its juice was said to coagulate milk.

Epiparoxy′smus. (From επι, upon, and παροξυσμος, a paroxysm.) An unusual frequency of febrile exacerbation.

Epipa′stum. (From επι, upon, and πασσω, to sprinkle.) Any powdered drug sprinkled on the body.

Epipe′chys. (From επι, above, and πηχυς, the cubit.) That part of the arm above the cubit.

Epiphlogi′sma. (From επι, upon, and φλογιζω, to inflame.) Violent inflammation, or burning heat in any part, attended with pain, tumour, and redness: also a name given by Hippocrates to the shingles.

EPI′PHURA. (From επιφερω, to carry forcibly.) The watery eye. An involuntary flow of tears. A superabundant flowing of a serous or aqueous humour from the eyes. A genus of disease in the class *locales*, and order *apocenoses*, of Cullen. The humour which flows very copiously from the eye, in epiphora, appears to be furnished, not only by the lachrymal gland, but from the whole surface of the conjunctive membrane, Meibomius's glands, and the caruncula lachrymalis; which increased and morbid secretion may be induced from any stimulus seated between the globe of the eye and lids, as sand, acrid fumes, and the like; or it may arise from the stimulus of active inflammation; or from the acrimony of scrophula, measles, small pox, &c. or from general relaxation. The disease may also arise from a more copious secretion of tears, than the puncta lachrymalia can absorb, or as is most common, from an obstruction in the lachrymal canal, in consequence of which the tears are prevented from passing freely from the eye into the nose.

EPI′PHYSIS. (From επι, upon, and φυω, to grow.) Any portion of bone growing upon another, but separated from it by a cartilage.

Epipla′sma. (From επι, upon, and πλασσω, to spread.) A poultice; also a name for an application of wheat meal, boiled in hydrelæum, to wounds.

EPIPLOCE′LE. (From επιπλοον, the omentum, and κηλη, a tumour.) An omental hernia. A rupture produced by the protrusion of a portion of the omentum. See *Hernia*.

Epiplocomi′stes. (From επιπλοον, the omentum, and κομιζω, to carry.) One who has the omentum morbidly large.

Epipiloic appendages. See *Appendiculæ epiploicæ*.

EPIPLOI′TIS. (From επιπλοον, the omentum.) An inflammation of the process of the peritoneum, that forms the epiploon or omentum. See *Peritonitis*.

Epiploo′mphalon. (From επιπλοον, the omentum, and ομφαλος, the navel.) An omental hernia protruding at the navel.

EPI′PLOON. (From επιπλοω, to sail over, because it is mostly found floating, as it were, upon the intestines.) See *Omentum*.

EPIPLOSCHEOCE′LE. (From επιπλοον, the omentum, οσχεον, the scrotum, and κηλη, a tumour or hernia.) A rupture of the omentum into the scrotum, or a scrotal hernia containing omentum.

Epipo′lasis. (From επιπολαζω, to swim on the top.) A fluctuation of humours. A species of chemical sublimation.

Epipo′ma. (From επι, upon, and πωμα, a lid.) An instrument to cover the shoulder in a luxation.

Epiporo′ma. (From επιπωρεω, to harden.) An indurated tumour in the joints; a callous concretion, a tophus, a tophaceous callus molesting the joints.

Epipty′xis. (From επιπτυσσω, to close up.) A spasmodic closing of the lips.

Epipyre′xis. (From επι, and πυρεττω, to be feverish.) A rapid exacerbation in a fever.

Epirige′sis. (From επι, and ριγεω to become cold.) An unusual degree of cold, or repetition of rigors.

Epi′rrhoe. (From επι, upon, and ρεω, to flow.) An influx or afflux of humours to any part.

Episarci′dium. (From επι, upon, and

σαρξ, the flesh.) An anasarca, or dropsy spread between the skin and flesh.

EPISCHE'SIS. (From επισχεω, to restrain.) A suppression of excretions. It is an order in the class *locales* of Cullen's Nosology.

Epi'schium. (From επι, upon, and ισχιον, the hip-bone.) The os pubis.

Episcopa'lis. (From *episcopus*, a bishop, or mitred dignitary.) Resembling a bishop's mitre. It is applied to a valve at the orifice between the left auricle and ventricle of the heart called the mitral valve.

Epispa'smus. (From επισπαω, to draw together.) A quick inspiration of the breath.

EPISPA'STICS. (*Epispastica*, sc. *medicamenta*, from επισπαω, to draw together.) Those substances which are capable, when applied to the surface of the body, of producing a serous or puriform discharge, by exciting a previous state of inflammation. The term, though comprehending likewise issues and setons, is more commonly restricted to blisters — those applications which, exciting inflammation on the skin, occasion a thin serous fluid to be poured from the exhalants, raise the cuticle, and form the appearance of a vesicle. This effect arises from their strong stimulating power, and to this stimulant operation and the pain they excite, are to be ascribed the advantages derived from them in the treatment of disease. The evacuation they occasion is too inconsiderable to have any material effect.

It is a principle sufficiently established with regard to the living system, that where a morbid action exists, it may often be removed by inducing an action of a different kind in the same or neighbouring part. On this principle is explained the utility of blisters in local inflammation and spasmodic action, and it regulates their application in pneumonia, gastritis, hepatitis, phrenitis, angina, rheumatism, colic, and spasmodic affections of the stomach; diseases in which they are employed with the most marked advantage.

A similar principle exists with respect to pain; exciting one pain often relieves another. Hence blisters often give relief in tooth-ache, and some other painful affections.

Lastly, blisters, by their operation, communicate a stimulus to the whole system, and raise the vigour of the circulation. Hence, in part, their utility in fevers of the typhoid kind, though in such cases they are used with still more advantage to obviate or remove local inflammation

Episphæ'ria. (From επι, and σφαιρα, a sphere; so-called from the spherical shape of the brain.) The windings of the exterior surface of the brain; or the winding vessels upon it.

Epista'gmus. (From επι, and ϛαζω, to trickle down.) A catarrh.

Epistaphyli'nus. (From επι, and ϛαφυλη.) See *Uvula*.

EPISTA'XIS. (From επιϛαζω, to distil from.) Bleeding at the nose, with pain, or fulness of the head. A genus of disease arranged by Cullen in the class *pyrexiæ*, and order *hæmorrhagiæ*.

Persons of a sanguine and plethoric habit and not yet advanced to manhood, are very liable to be attacked with this complaint: females being much less subject to it than males, particularly after menstruation.

Epistaxis comes on at times without any previous warning; but at others, it is preceded by a pain and heaviness in the head, flushing in the face, heat and itching in the nostrils, a throbbing of the temporal arteries and a quickness of the pulse. In some instances a coldness of the feet, and shivering over the whole body, together with a costive belly, are observed to precede an attack of this hæmorrhage.

This complaint is to be considered as of little consequence, when occurring in young persons, being never attended with any danger; but when it arises in those who are advanced in life, flows profusely and returns frequently, it indicates too great fulness of the vessels of the head, and not unfrequently precedes apoplexy, palsy, &c. and, therefore, in such cases, is to be regarded as a dangerous disease. When this hæmorrhage arises in any putrid disorder, it is to be considered as a fatal symptom.

In general, we need not be very anxious to stop a discharge of blood from the nose, particularly where there are marks of fulness of the vessels of the head: but if it occurs under a debilitated state of the system, or becomes very profuse, means must be employed to suppress it. These are chiefly of a local nature; applying pressure to the bleeding vessels, introducing astringents into the nostrils, as solutions of alum, sulphate of zinc, sulphate of copper, &c. applying cold to the head, or to some very sensible part of the skin, as in the course of the spine, &c. At the same time the patient should be kept in the erect position. If the hæmorrhage be of an active character, the antiphlogistic regimen should be carefully observed: the patient kept cool and quiet; the saline cathartics, refrigerants, as nitrate of potash and the acids, digitalis, diaphoretics, &c. administered internally; and blood may be taken from the temples by leeches, or even from the arm, if the patient be very plethoric. Sometimes, after the failure of other means, closing the posterior as well as anterior outlets from the nose, and preventing the escape of the blood for some time mechanically, has been successful; and this might be particularly proper, where it was discharged copiously into the fauces, so as to endanger suffocation, on the patient falling asleep.

EPISTHO′TONOS. (From επιϛθεν, forwards, and τεινω, to extend.) A spasmodic affection of muscles drawing the body forwards. See *Tetanus*.

Episto′mion. (From επι, upon, and ϛομα, a mouth.) A stopper for a bottle. Also a vent-hole of a furnace, called the register.

Epistro′phalus. (From επι, upon, and ϛρεφω, to turn about.) It is applied to the first vertebra of the neck, because it turns about upon the second as upon an axis, which therefore was so called by the antients. Some, though improperly, called the second thus. It is also written *Epistrophea* and *Epistrophis*.

Epi′strophe. (From επιϛρεφω, to invert.) An inversion of any part, as when the neck is turned round. Also a return of a disorder which has ceased.

EPI′STROPHEUS. (From επιϛροφαω, to turn round, because the head is turned upon it.) *Epistrophæus*. The second cervical vertebra. See *Dentatus*.

Epi′strophis. See *Epistrophalus*.

Epi′tasis. (From επι, and τεινω, to extend.) The beginning and increase of a paroxysm or disease.

EPITHE′LIUM. The cuticle on the red part of the lips.

Epithe′ma. (From επι, upon, and τιθημι, to apply.) A term sometimes applied to a lotion, fomentation, or some external application.

Epithema′tium. The same. A plaster.

Epi′thesis. (From επι, and τιθημι, to cover, or lay upon.) The rectification of crooked limbs by means of instruments.

EPITHY′MUM. (From επι, upon, and θυμος, the herb thyme.) See *Cuscuta Epithymum*.

Epo′de. (From επι, over, and ωδη, a song.) *Epodos*. The method of curing distempers by incantation.

Epom′is. (From επι, upon, and ωμος, the shoulder.) The acromion, or upper part of the shoulder.

Epompha′lium. (From επι, upon, and ομφαλος, the navel.) An application to the navel.

EPSOM SALT. A purging salt formerly obtained by boiling down the mineral water found in the vicinity of Epsom in Surrey. It is at present prepared from sea water, which, after being boiled down, and the muriate of soda separated, deposits numerous crystals, that consist chiefly of sulphate of magnesia, and sold in the shops under the name of sal catharticus amarus, or bitter purging salt. See *Magnesiæ Sulphas*.

EPSOM WATER. *Aqua Epsomensis*. This water evaporated to dryness leaves a residuum, the quantity of which has been estimated from an ounce and a half in the gallon, to five drachms and one scruple. Of the total residuum, by far the greater part, about four or five-sixths, is sulphate of magnesia mixed with a very few muriates, such as that of lime, and probably magnesia, which render it very deliquescent, and increase the bitterness of taste, till purified by repeated crystallizations. There is nothing sulphurous or metallic ever found in this spring. The diseases in which it is employed are similar to those in which we use Sedlitz water. There are many other of the simple saline springs that might be enumerated, all of which agree with that of Epsom, in containing a notable proportion of some purging salt, (which, for the most part, is either Epsom or Glauber's salt, or often a mixture of both,) such as Acton, Kilburne, Bagnigge Wells, Dog and Duck, St. George's Fields, &c.

EPU′LIS. (From επι, and ουλα, the gums.) A small tubercle on the gums. It is said sometimes to become cancerous.

EPULO′TICS. (*Epulotica*, sc. *medicamenta*; from επουλοω, to cicatrize.) A term given by surgeons to those applications which promote the formation of skin.

EQUISE′TUM. (From *equus*, a horse, and *seta*, a bristle: so named from its resemblance to a horse's tail.)

1. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Filices*.

2. The pharmacopœial name of the *Cauda equina*. See *Hippuris vulgaris*.

Equise′tum arve′nse. See *Hippuris vulgaris*.

E′quus a′sinus. The systematic name of the animal called an ass; the female affords a light and nutritious milk.

Era′nthemus. (From ηρ, the spring, and ανθεμος, a flower; so called because it flowers in the spring.) A sort of chamomile.

ERASIS′TRATUS, a celebrated Greek physician, said to have been born in the island of Ceos, and to have been the most distinguished pupil of Chrysippus, of the Cnidian school. He was the first, in conjunction with Herophilus, to dissect human bodies, anatomy having been before studied only in brutes; but the Ptolemies having allowed them to examine malefactors, they were enabled to make many important discoveries. Celsus notices a very improbable report, that they opened the bodies of those persons alive, to observe the internal motions: they could hardly then have maintained, that the arteries and left ventricle, do not naturally contain blood, but air only. The works of Erasistratus, which were numerous, are lost; but, from the account of Galen, he appears to have very accurately described the brain, which he considered as the common sensorium; also the heart and large vessels; and pointed out the office of the liver and kidneys; but he supposed digestion performed by trituration. He imagined inflammation and fever to arise from the blood being forced through the minute veins into the corresponding arteries. He was averse from blood-letting, or the use of active medicines, but sometimes employed mild clysters; trusting, however, principally to abstinence, and proper exercise. Being tormented with an ulcer in the foot, at an extreme old age, he is said to have terminated his existence by poison.

Erate′va ma′rmelos. The fruit of this plant, a native of several parts of India, is about the size of an orange, and covered with a hard bony shell, containing a yellow viscous pulp, of a most agreeable flavour; this is scooped out, and being mixed with sugar and orange, is brought to the tables of the grandees in India, who eat it as a great delicacy. It is also esteemed as a sovereign remedy against dysentery.

Erebi′nthus. (Ερεϐινθος.) The vetch.

ERE′CTOR CLITO′RIDIS. First muscle of the clitoris of Douglas. *Ischio-cavernosus* of Winslow, and *Ischio-clitoridien* of Dumas. A muscle of the clitoris that draws it downwards and backwards, and serves to make the body of the clitoris more tense, by squeezing the blood into it from its crus. It arises from the tuberosity of the ischium, and is inserted into the clitoris.

ERE′CTOR PE′NIS. *Ischio-cavernosus* of Winslow, and *Ischio-caverneux* of Dumas. A muscle of the penis that drives the urine or semen forwards, and, by grasping the bulb of the urethra, pushes the blood towards the corpus cavernosum and the glans, and thus distends them. It arises from the tuberosity of the ischium, and is inserted into the sides of the cavernous substance of the penis.

ERETHI′SMUS. (From ερεθιζω, to excite or irritate.) Increased sensibility and irritability. It is variously applied by modern writers. Mr. Pearson has described a state of the constitution produced by mercury acting on it as a poison. He calls it the mercurial erethismus, and mentions that it is characterized, by great depression of strength, anxiety about the præcordia, irregular action of the heart, frequent sighing, trembling, a small, quick, sometimes intermitting pulse, occasional vomiting, a pale contracted countenance, a sense of coldness; but the tongue is seldom furred, nor are the vital and natural functions much disturbed. In this state any sudden exertion will sometimes prove fatal.

Ergaste′rium. (From εργον, work.) A laboratory; that part of the furnace in which is contained the matter to be acted upon.

ERI′CA. (From ερεικω, to break; so named from its fragility, or because it is broken into rods to make besoms of.) The name of a genus of plants in the Linnæan system. Class, *Octandria*. Order, *Monogynia*. Heath.

Erice′rum. (From ερεικη, heath.) A medicine in which heath is an ingredient.

Eri′gerum. (From ηρ, the spring, and γερων, old; so called, because in the spring it has a white blossom like the hair of an old man.) See *Senecio vulgaris*.

ERO′SION. (From *erodo*, to gnaw off.) *Erosio*. This word is very often used in the same sense as ulceration, viz. the formation of a breach or chasm in the substance of parts, by the action of the absorbents.

EROTIA′NUS, the author of a glossary, containing an explanation of the terms in Hippocrates, lived in the reign of Nero. The work was printed at Venice, in 1566; and also annexed to Foësius's Edition of Hippocrates.

Erotoma′nia. (From ερως, love, and μανια, madness.) That melancholy, or madness, which is the effect of love.

E′rpes. (From ερπω, to creep; so named from their gradually increasing in size.) The shingles, or herpes.

ERRA′TIC. (*Erraticus*, from *erro*, to wander.) Wandering. Irregular. A term occasionally applied to pains, or any disease which is not fixed, but moves from one part to another, as gout, rheumatism, &c.

E′RRHINE. (*Errhina*, sc. *medicamenta*: ερρινα, from εν, in, and ριν, the nose.) By errhines are to be understood those medicines which, when topically applied to the internal membrane of the nose, excite sneezing, and increase the secretion, independent of any mechanical irritation. The articles belonging to this class may be referred to two orders.

1. *Sternutatary errhines*, as *nicotiana*, *helleborus*, *euphorbium*, which are selected for the torpid, the vigorous, but not plethoric; and those to whom any degree of evacuation would not be hurtful.

2. *Evacuating errhines*, as *asarum*, &c. which are calculated for the phlegmatic and infirm.

E′rror lo′ci. Boerhaave is said to have introduced this term, from the opinion that the vessels were of different sizes, for the circulation of blood, lymph, and serum, and that when the larger sized globules were forced into the lesser vessels, they became obstructed, by an *error of place*. But this opinion does not appear to be well grounded.

Eru′ca. (From *erugo*, to make smooth, so named from the smoothness of its leaves; or from *uro*, to burn, because of its biting quality.) See *Brassica*.

Eru′ca sylve′stris. The wild rocket. *Brassica erucastrum* of Linnæus. See *Brassica*.

ERUPTION. A discolouration, or spots on the skin, as the eruption of small pox, measles, nettle-rash, &c.

ERUPTIVE DISEASES. A term nearly synonimous with cutaneous diseases.

Eruthe′ma. (From ερευθω, to make red.) A fiery red tumour, or pustules on the skin.

E′RVUM. (*Quasi arvum*, a field, because it grows wild in the fields: or from *eruo*, to pluck out, because it is diligently plucked from corn.) The tare.

1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

2. The pharmacopœial name of tare. See *Ervum Ervilia.*

Er′vum er′vilia. *Orobus.* The plant ordered by this name is the *Ervum ervilia; germinibus undato plicatis, foliis imparipinnatis*, of Linnæus. In times of scarcity, the seeds have been made into bread, which is not the most salubrious. The meal was formerly amongst the resolvent remedies by way of poultice.

E′rvum lens. The systematic name of the lentil. *Lens*, φακος of the Greeks. *Ervum lens pedunculis subbifloris; seminibus compressis, convexis*, of Linnæus. There are two varieties; the one with large, the other small seeds. They are eaten in many places as we eat peas, than which they are more flatulent, and more difficult to digest. A decoction of these seeds is used as a lotion to the ulcerations after small-pox, and, it is said, with success.

ERY′NGIUM. (From ερυγγανω, to eructate.) Eryngo, or sea-holly.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the sea holly. See *Eryngium maritimum.*

Eryngium maritimum. The systematic name of the sea holly or eryngo. *Eryngium:—foliis radicalibus subrotundis, plicatis spinosis, capitulis pedunculatis, paleis tricuspidatis*, of Linnæus. The root of this plant is directed for medicinal use. It has no particular smell, but to the taste it manifests a grateful sweetness; and, on being chewed for some time, it discovers a light aromatic warmth or pungency. It was formerly celebrated for its supposed aphrodisiac powers, but it is now very rarely employed.

Ery′ngium campe′stre. The root of this plant, *Eryngium campestre; foliis radicalibus, amplexicaulibus, pinnato-lanceolatis*, of Linnæus, is used in many places for that of the sea eryngo. See *Eryngium.*

Eryngo. See *Eryngium.*

Eryngo, sea. See *Eryngium.*

Eryngo leaved lichen. See *Lichen islandicus.*

ERY′SIMUM. (From ερυω, to draw, so called from its power of drawing and producing blisters; others derive it απο του ερεικειν, because the leaves are much cut; others from εριτιμον, precious.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.*

2. The pharmacopœial name of the hedge mustard. See *Erysimum officinale.*

Ery′simum allia′ria. The systematic name of Jack in the hedge. *Alliaria.* Sauce-alone, or stinking hedge-mustard. The plant to which this name is given, in the pharmacopœias, is the *Erysimum alliaria; foliis cordatis*, of Linnæus; it is sometimes exhibited in humid asthma and dyspnœa, with success. Its virtues are powerfully diaphoretic, diuretic, and antiscorbutic.

Ery′simum barbare′a. The systematic name of the barbarea of the shops. *Barbarea.* The leaves of this plant, *Erysimum barbarea:—foliis lyratis, extimo subrotundo* of Linnæus, may be ranked among the antiscorbutics. They are seldom used in practice.

Ery′simum officina′le. The systematic name of the hedge mustard. *Erysimum.* This plant; *Erysimum siliquis spicæ adpressis, foliis runcinatis*, of Linnæus, was formerly much used for its expectorant and diuretic qualities, which are now forgotten. The seeds are warm and pungent, and very similar to those of mustard in their sensible effects.

ERYSI′PELAS. (From ερυω, to draw, and πελας, adjoining; named from the neighbouring parts being affected by the eruption.) *Ignis sacer.* The rose, or St. Anthony's fire. A genus of disease in the class *pyrexiæ*, and order *exanthemata* of Cullen. It is known by synocha of two or three days continuance, with drowsiness, and sometimes with delirium; pulse commonly full and hard; then erythema of the face, or some other part, with continuance of synocha, tending either to abscess or gangrene. There are two species of this disease, according to Cullen: 1. *Erysipelas vesiculosum*, with large blisters: 2. *Erysipelas phlyctænodes*, the shingles, or an erypelas with phlyctænæ, or small blisters.

This disease is an inflammatory affection, principally of the skin, when it makes its appearance externally, and of the mucous membrane when it is seated internally; and is more liable to attack women and children, and those of an irritable habit, than those of a plethoric and robust constitution.

It is remarkable that erysipelas sometimes returns periodically, attacking the patient once or twice in the year, or even once every month, and then by its repeated attacks it often gradually exhausts the strength, especially if he be old and of a bad habit.

When the inflammation is principally confined to the skin, and is unattended by any affection of the system, it is then called erythema; but when the system is affected it is named erysipelas.

Every part of the body is equally liable to it, but it more frequently appears on the face, legs, and feet, than any where else when seated externally; and it occurs oftener in warm climates than phlegmonous inflammation.

It is brought on by all the causes that are apt to excite inflammation, such as injuries of all kinds, the external application of stimulants, exposure to cold, and obstructed perspiration; and it may likewise be occasioned by a certain matter generated within the body, and thrown out on its surface. A particular state of the atmosphere seems sometimes to render it epidemical.

In slight cases, where it attacks the extremities, it makes its appearance with a roughness, heat, pain, and redness of the skin, which becomes pale when the finger is pressed upon it, and again returns to its former colour, when it is removed, There prevails likewise a small febrile disposition, and the patient is rather hot and thirsty. If the attack is mild, these symptoms will continue only for a few days, the surface of the part affected will become yellow, the cuticle or scarf-skin will fall off in scales, and no further inconvenience will perhaps be experienced; but if the attack has been severe, and the inflammatory symptoms have run high, then there will ensue pains in the head and back, great heat, thirst, and restlessness; the part affected will slightly swell: the pulse will become small and frequent; and about the fourth day, a number of little vesicles, containing a limpid, and, in some cases, a yellowish fluid, will arise. In some instances, the fluid is viscid, and instead of running out, as generally happens when the blister is broken, it adheres to and dries upon the skin.

In unfavourable cases, these blisters sometimes degenerate into obstinate ulcers, which now and then become gangrenous. This, however, does not happen frequently; for although it is not uncommon for the surface of the skin, and the blistered places to appear livid or even blackish, yet this usually disappears with the other symptoms of the complaint.

The period at which the vesicles shew themselves is very uncertain. The same may be said of the duration of the eruption. In mild cases, it often disappears gradually, or is carried off by spontaneous sweating. In some cases it continues without shewing any disposition to decline for twelve or fourteen days, or longer.

The trunk of the body is sometimes attacked with erysipelatous inflammation, but less frequently so than the extremities. It is not uncommon, however, for infants to be attacked in this manner a few days after birth; and in these it makes its appearance about the genitals. The inflamed skin is hard, and apparently very painful to the touch. The belly often becomes uniformly tense, and sphacelated spots sometimes are to be observed. From dissections made by Dr. Underwood, it appears, that in this form of the disease the inflammation frequently spreads to the abdominal viscera.

Another species of erysipelatous inflammation, which most usually attacks the trunk of the body, is that vulgarly known by the name of *shingles*, being a corruption of the French word *ceingle*, which implies a belt. Instead of appearing an uniform inflamed surface, it consists of a number of little pimples extending round the body a little above the umbilicus, which have vesicles formed on them in a short time. Little or no danger ever attends this species of erysipelas.

When erysipelas attacks the face, it comes on with chilliness, succeeded by heat, restlessness, thirst, and other febrile symptoms, with a drowsiness or tendency to coma or delirium, and the pulse is very frequent and full. At the end of two or three days, a fiery redness appears on some part of the face, and this extends at length to the scalp, and then gradually down the neck, leaving a tumefaction in every part the redness has occupied. The whole face at length becomes turgid, and the eyelids are so much swelled as to deprive the patient of sight. When the redness and swelling have continued for some time, blisters of different sizes, containing a thin colourless acrid liquor, arise on different parts of the face, and the skin puts on a livid appearance in the blistered places; but in those not affected with blisters, the cuticle, towards the close of the disease, falls of in scales.

No remission of the fever takes place on the appearance of the inflammation on the face; but, on the contrary, it is increased as the latter extends, and both will continue probably for the space of eight or ten days. In the course of the inflammation, the disposition to coma and delirium are sometimes so increased as to destroy the patient between the seventh and eleventh days of the disease. When the complaint is mild, and not leading to a fatal event, the inflammation and fever generally cease gradually without any evident crisis.

If the disease arises in a bad habit of body, occupies a part possessed of great sensibility, is accompanied with much inflammation, fever, and delirium, and these take place at an early period, we may suppose the patient exposed to imminent danger. Where translations of the morbid matter take place, and the inflammation falls on either the brain, lungs, or abdominal viscera, we may entertain the same unfavourable opinion. Erysipelas never terminates in suppuration, unless combined with a considerable degree of phlegmonous inflammation, which is, however, sometimes the case; but in a bad habit, it is apt to terminate in gangrene, in which case there will be also great danger. When the febrile symptoms are mild, and unaccompanied by delirium or coma, and the inflammation does not run high, we need not be apprehensive of danger.

Where the disease has occupied the face, and proves fatal, inflammation of the brain, and its consequences, are to be met with on dissection.

The treatment of erysipelas must proceed on the antiphlogistic plan, varied however in its activity according to the type of the disease. When it occurs in robust plethoric constitutions, partaking of the phlegmonous character, with severe synochal fever, it will be proper to begin by taking a moderate quantity of blood; then direct cooling saline purgatives, antimonial diaphoretics, a light vegetable diet, &c. When the disorder attacks the face, it may be better to use cupping behind the neck, and keep the head somewhat raised. But if the disease exhibits rather the typhoid type, and particularly where there is a tendency to gangrene, the patient's strength must be supported: after clearing out the primæ viæ, and endeavouring to promote the other secretions by mild evacuants, when the pulse begins to fail, a more nutritious diet, with a moderate quantity of wine, and the decoction of bark with sulphuric acid, or other tonic medicine, may be resorted to; nay, even the bark in substance, and the more powerful stimulants, as ammonia, &c. ought to be tried, if the preceding fail. Should the inflammation, quitting the skin, attack an internal part, a blister, or some rubefacient, may help to relieve the patient; and stimulants to the lower extremities will likewise be proper, where the head is severely affected. To the inflamed part of the skin applications must not be too freely made: where there is much pain and heat, cooling it occasionally with plain water, is perhaps best; and where an acrid discharge occurs, washing it away from time to time with warm milk and water. Should suppuration happen, it is important to make an early opening for the escape of the matter, to obviate the extensive sloughings otherwise apt to follow, and where gangrene occurs, the fermenting cataplasm may be applied.

ERYTHE′MA. (From ερυθρος, red.) A morbid redness of the skin, as is observed upon the cheeks of hectic patients after eating, and the skin covering bubo, phlegmon, &c. Erysipelas is so called when the inflammation is principally confined to the skin.

ERYTHRO′DANUM. (From ερυθρος, red, so called from the colour of its juice.) See *Rubia*.

ERYTHROEI′DES. (From ερυθρος, red, and ειδος, a likeness, so called from its colour.) A name given to the tunica vaginalis testis.

ERYTHRO′NIUM. (From ερυθρος, red, so called from the red colour of its juice.) A species of satyrion.

ERYTHRO′XYLUM. (From ερυθρος, red, and ξυλον, wood, so named from its colour.) Logwood.

E′RYTHRUS. (From ερυθρος, red, so named from the red colour of its juice.) The herb stumach.

E′SAPHE. (From εσαφαω, to feel.) The touch; or feeling the mouth of the womb, to know its state.

E′SCHAR. (Εσχαρα, from εσχαροω, to scab over.) *Eschara*. The portion of flesh that is destroyed by the application of a caustic.

ESCHARO′TICS. (*Escharotica*, sc. *medicamenta*, εσχαρωτικα, from εσχαροω, to scab over.) Caustics. Corrosives. A term given by surgeons to those substances which possess a power of destroying the texture of the various solid parts of the animal body to which they are directly applied. The articles of this class of substances may be arranged under two orders.

1. *Eroding escharotics*, as blue vitriol, alumen ustum, &c.

2. *Caustic escharotics*, as *lapis infernalis, argentum nitratum, oleum vitrioli, acidum nitrosum*, &c.

ESCULENT. An appellation given to such plants, or any part of them, that may be eaten for food.

E′SOX LU′CIUS. The systematic name of a fish of the class *pisces*, and order *abdominales*, from whose liver an oil spontaneously is separated, which is termed in some pharmacopœias *oleum lucii piscis*. It is used in some countries by surgeons, to destroy spots of the transparent cornea.

E′SSENCE. Several of the volatile or essential oils are so called by the perfumers.

ESSE′NTIAL OIL. See *Oil*.

E′SSERA. (Arab. A humour.) A species of cutaneous eruption, distinguished by broad, shining, smooth, red spots, mostly without fever, and differing from the nettle rash in not being elevated. It generally attacks the face and hands.

E′SULA. (From *esus*, eaten, because it is eaten by some as a medicine.) Spurge.

E′SULA MA′JOR. See *Euphorbia palustris*.

E′SULA MI′NOR. See *Euphorbia cyparissias*.

E′THER. See *Æther*.

E′THER, ACE′TIC. Acetic naphtha. An etherial fluid, drawn over from an equal admixture of alkohol and acetic acid, distilled with a gentle heat from a glass resort in a sand-bath. It has a grateful smell, is extremely light, volatile, and inflammable.

E′THER, MURIA′TIC. Marine ether. Marine ether is obtained by mixing and distilling alkohol with extremely concentrated muriate of tin. It is stimulant, antiseptic, and diuretic.

E′THER, NI′TROUS. Nitric naphtha. This is only a stronger preparation than the spiritus ætheris nitrici of the London Pharmacopœia; it is produced by the distillation of two parts of alkohol to one part and an half of fuming nitric acid.

E'THER, SULPHU'RIC. See *Æther sulphuricus.*

E'THER, VITRIO'LIC. See *Æther sulphuricus.*

ETHE'RIAL OIL. Any highly rectified essential oil may be so termed. See *Oleum Æthereum.*

E'thiops, antimónial. See *Æthiops antimonialis.*

E'thiops, míneral. See *Hydrargyri sulphuretum nigrum.*

E'thiops per se. See *Hydrargyri oxydum cinereum.*

ETHMOI'DES. See *Ethmoid bone.*

ETHMOID BONE. (*Os ethmoides;* from εθμος, a sieve, and ειδος, form; because it is perforated like a sieve.) *Os ethmoideum. Os æthmoides.* Cribriform bone. A bone of the head. This is, perhaps, one of the most curious bones of the human body. It appears almost a cube, not of solid bone, but exceedingly light, spongy, and consisting of many convoluted plates, which form a net-work, like honey-comb. It is curiously enclosed in the os frontis, betwixt the orbitary processes of that bone. One horizontal plate receives the olfactory nerves, which perforate that plate with such a number of small holes, that it resembles a sieve; whence the bone is named cribriform, or ethmoid bone. Other plates dropping perpendicularly from this one, receive the divided nerves, and give them an opportunity of expanding into the organ of smelling; and these bones, upon which the olfactory nerves are spread out, are so much convoluted as to extend the surface of this sense very greatly, and are named spongy bones. Another flat plate lies in the orbit of the eye; and being very smooth, by the rolling of the eye it is named the os planum, or smooth bone. So that the ethmoid bone supports the fore-part of the brain, receives the olfactory nerves, forms the organ of smelling, and makes a chief part of the orbit of the eye; and the spongy bones, and the os planum, are neither of them distinct bones, but parts of this ethmoid bone.

The *cribriform plate* is exceedingly delicate and thin; lies horizontally over the root of the nose; and fills up neatly the space betwixt the two orbitary plates of the frontal bone. The olfactory nerves, like two small flat lobes, lie out upon this plate, and, adhering to it, shoot down like many roots through this bone, so as to perforate it with numerous small holes, as if it had been dotted with the point of a pin, or like a nutmeg-grater. This plate is horizontal; but its processes are perpendicular, one above, and three below.

1. The first perpendicular process is what is called *crista galli;* a small perpendicular projection, somewhat like a cock's comb, but exceedingly small, standing directly upwards from the middle of the cribriform plate, and dividing that plate into two; so that one olfactory nerve lies upon each side of the crista galli; and the root of the falx, or septum, betwixt the two hemispheres of the brain, begins from this process. The foramen cæcum, or blind hole of the frontal bone, is formed partly by the root of the crista galli, which is very smooth, and sometimes, it is said, hollow, or cellular.

2. Exactly opposite this, and in the same direction with it, *i. e.* perpendicular to the ethmoid plate, stands out the *nasal plate* of the ethmoid bone. It is sometimes called azygous, or single process of the ethmoid, and forms the beginning of that septum, or partition, which divides the two nostrils. This process is thin but firm, and composed of solid bone; it is commonly inclined a little to one side, so as to make the nostrils of unequal size. The azygous process is united with the vomer, which forms the chief part of the partition; so that the septum, or partition of the nose, consists of the azygous process of the ethmoid bone above, of the vomer below, and of the cartilage in the fore or projecting part of the nose; but the cartilage rots away, so that whatever is seen of the septum in the skull, must be part either of the ethmoid bone or vomer.

3. Upon either side of the septum, there hangs down a *spongy bone,* one hanging in each nostril. They are each rolled up like a scroll of parchment; they are very spongy; are covered with a delicate and sensible membrane: and when the olfactory nerves depart from the cribriform plate of the ethmoid bone, they attach themselves to the septum, and to these upper spongy bones, and expand upon them so that the convolutions of these bones are of material use in expanding the organ of smelling, and detaining the odorous effluvia till the impression be perfect. Their convolutions are more numerous in the lower animals, in proportion as they need a more acute sense. They are named spongy or turbinated bones, from their convolutions resembling the many folds of a turban.

The spongy bones have a great many honey-comb-like cells connected with them, which belong also to the organ of smell, and which are useful perhaps by detaining the effluvia of odorous bodies, and also by reverberating the voice. Thus, in a common cold, while the voice is hurt by an affection of these cells, the sense of smelling is almost lost.

4. The *orbitary plate,* of the ethmoid bone, is a large surface; consisting of a very firm plate of bone, of a regular square form: exceedingly smooth and polished;

it forms a great part of the socket for the eye, lying on its inner side. When we see it in the detached bone, we know it to be just the flat side of the ethmoid bone; but while it is incased in the socket of the eye, we should believe it to be a small square bone: and from this, and from its smoothness, it has got the distinct name of os planum.

The cells of the ethmoid bone, which form so important a share of the organ of smell, are arranged in great numbers along the spongy bone. They are small neat cells, much like a honey-comb, and regularly arranged in two rows, parted from each other by a thin partition; so that the os planum seems to have one set of cells attached to it, while another regular set of cells belongs in like manner to the spongy bones. There are thus twelve in number opening into each other, and into the nose.

These cells are frequently the seat of venereal ulcers; and the spongy bones are the surface where polypi often sprout up. And from the general connections and forms of the bone, we can easily understand how the venereal ulcer, when deep in the nose, having got to these cells, cannot be cured, but undermines all the face; how the venereal disease, having affected the nose, soon spreads to the eye, and how even the brain itself is not safe. We see the danger of a blow upon the nose, which, by a force upon the septum, or middle partition, may depress the delicate cribriform plate, so as to oppress the brain with all the effects of a fractured skull, and without any operation which can give relief. And we also see the danger of pulling away polypi, which are firmly attached to the upper spongy bone.

ETMULLER, Michael, was born at Leipsic in 1644. He graduated there at the age of twenty-four, after going through the requisite studies, and much improving himself by travelling through different parts of Europe. Eight years after he was appointed professor of Botany in that University, as well as extraordinary professor of surgery and anatomy. He fulfilled those offices with great applause, and his death, which happened in 1683, was generally regretted by the faculty of Leipsic. He was a very voluminous writer, and his works were considered to have sufficient merit to be translated into most European languages.

E′tron. (From εδω, to eat, as containing the receptacles of the food.) The hypogastrium.

Eua′nthemum. (From ευ, well, and ανθεμος, a flower; so named from the beauty of its flowers.) The chamomile.

Eua′phium. (From ευ, well, and αφη, the touch; so called because its touch was supposed to give ease.) A medicine for the piles.

EUDIOMETER. An instrument by which the quantity of oxygen and nitrogen in atmospherical air can be ascertained. Several methods have been employed, all founded upon the principle of decomposing common air by means of a body which has a greater affinity for the oxygen. See *Eudiometry*.

EUDIOMETRY. The method of ascertaining the purity of atmospheric air.

No sooner was the composition of the atmosphere known, than it became an inquiry of importance to find out a method of ascertaining, with facility and precision, the relative quantity of oxygen gas contained in a given bulk of atmospheric air.

The instruments in which the oxygen gas of a determined quantity of air was ascertained, received the name of *Eudiometers*, because they were considered as measurers of the purity of air. They are, however, more properly called *Oximeters*.

The eudiometers proposed by different chemists, are the following:

1. *Priestley's Eudiometer*.

The first eudiometer was made in consequence of Dr. Priestley's discovery, that when nitrous gas is mixed with atmospheric air over water, the bulk of the mixture diminishes rapidly, in consequence of the combination of the gas with the oxygen of the air, and the absorption of the nitric acid thus formed by the water.

When nitrous gas is mixed with nitrogen gas, no diminution takes place; but when it is mixed with oxygen gas, in proper proportions, the absorption is complete. Hence it is evident, that in all cases of a mixture of these two gases, the diminution will be proportional to the quantity of the oxygen. Of course it will indicate the proportion of oxygen in air; and, by mixing it with different portions of air, it will indicate the different quantities of oxygen which they contain, provided the component parts of air be susceptible of variation.

Dr. Priestley's method was to mix together equal bulks of air and nitrous gas in a low jar, and then transfer the mixture into a narrow graduated glass tube about three feet long, in order to measure the diminution of bulk. He expressed this diminution by the number of hundredth parts remaining. Thus, suppose he had mixed together equal parts of nitrous gas and air, and that the sum total was 200 (or 2.00): suppose the residuum, when measured in the graduated tube, to amount to 104 (or 1.04), and of course that 96 parts of the whole had disappeared, he denoted the purity of the air thus tried by 104.

This method of analyzing air by means of nitrous gas is liable to many errors. For the water over which the experiment is made may contain more or less carbonic acid, atmospheric air, or other heterogeneous substance. The nitrous gas is not always of the same purity, and is partly absorbed by the nitrous acid which is formed; the figure of the vessel, and many other circumstances are capable of occasioning considerable differences in the results.

Fontana, Cavendish, Ladriani, Magellan, Von Humboldt, and Dr. Falconer, have made series of laborious experiments to bring the test of nitrous gas to a state of complete accuracy; but, notwithstanding the exertions of these philosophers, the methods of analyzing air by means of nitrous gas are liable to so many anomalies, that it is unnecessary to give a particular description of the different instruments invented by them.

2. *Scheele's Eudiometer.*

This is merely a graduated glass cylinder, containing a given quantity of air, exposed to a mixture of iron filings and sulphur, formed into a paste with water. The substances may be made use of in the following manner:

Make a quantity of sulphur in powder, and iron filings, into a paste with water, and place the mixture in a saucer, or plate, over water, on a stand raised above the fluid; then invert over it a graduated bell-glass, and allow this to stand for a few days. The air contained in the bell-glass will gradually diminish, as will appear from the ascent of the water.

When no further diminution takes place, the vessel containing the sulphuret must be removed, and the remaining air will be found to be nitrogen gas, which was contained in that quantity of atmospheric air.

In this process, the moistened sulphuret of iron has a great affinity to oxygen, it attracts and separates it from the atmospheric air, and the nitrogen gas is left behind; the sulphur, during the experiment, is converted into sulphuric acid, and the iron oxidized, and sulphate of iron results.

The air which is exposed to moistened iron and sulphur, gradually becomes diminished, on account of its oxygen combining with a portion of the sulphur and iron, while its nitrogen remains behind. The quantity of oxygen contained in the air examined becomes thus obvious, by the diminution of bulk, which the volume of air submitted to examination, has undergone.

A material error to which this method is liable, is that the sulphuric acid which is formed, acts partly on the iron, and produces hydrogen gas, which joins to some of the nitrogen forming ammonia; and hence it is that the absorption amounts in general to 0.27 parts, although the true quantity of oxygen is no more than from 0.21 to 0.22.

3. *De Marti's Eudiometer.*

De Marti obviated the errors to which the method of Scheele was liable. He availed himself, for that purpose, of a hydroguretted sulphuret, formed by boiling sulphur and liquid potash, or lime water, together. These substances, when newly prepared, have the property of absorbing a minute portion of nitrogen gas; but they lose this property when saturated with that gas, which is easily effected by agitating them for a few minutes in contact with a small portion of atmospheric air.

The apparatus is merely a glass tube, ten inches long, and rather less than half an inch in diameter, open at one end, and hermetically sealed at the other. The close end is divided into one hundred equal parts, having an interval of one line between each division. The use of this tube is to measure the portion of air to be employed in the experiment. The tube is filled with water; and by allowing the water to run out gradually, while the tube is inverted, and the open end kept shut with the finger, the graduated part is exactly filled with air. These hundred parts of air are introduced into a glass bottle, filled with liquid sulphuret of lime previously saturated with nitrogen gas, and capable of holding from two to four times the bulk of the air introduced. The bottle is then to be closed with a ground glass stopper, and agitated for five minutes. After this, the stopper is to be withdrawn, while the mouth of the phial is under water; and, for the greater accuracy, it may be closed and agitated again. Lastly, the air is to be again transferred to the graduated glass tube, in order to ascertain the diminution of its bulk.

4. *Humboldt's Eudiometer*

Consists in decomposing a definite quantity of atmospheric air, by means of the combustion of phosphorus, after which, the portion of gas which remains must be measured.

Take a glass cylinder, closed at the top, and whose capacity must be measured into sufficiently small portions by a graduated scale fixed on it. If the instrument be destined solely for examining atmospheric air, it will be sufficient to apply the scale from the orifice of the cylinder down to about half its length, or to sketch that scale on a slip of paper pasted on the outside of the tube, and to varnish it over with a transparent varnish.

This half of the eudiometrical tube is divided into fifty equidistant parts, which in this case indicate hundredth parts of the whole capacity of the instrument.

Into this vessel, full of atmospheric air, put a piece of dry phosphorus, (one grain to every twelve cubic inches,) close it air-tight, and heat it gradually, first the sides near the bottom, and afterwards the bottom itself. The phosphorus will take fire and burn rapidly. After every thing is cold, invert the mouth of the eudiometer-tube into a bason of water, and withdraw the cork. The water will ascend in proportion to the loss of oxygen gas the air has sustained, and thus its quantity may be ascertained.

Analogous to this is

5. *Seguin's Eudiometer,*

Which consists of a glass tube, of about one inch in diameter, and eight or ten inches high, closed at the upper extremity. It is filled with mercury, and kept inverted in this fluid in the mercurial trough. A small bit of phosphorus is introduced into it, which on account of its specific gravity being less than that of mercury, will rise up in it to the top. The phosphorus is then melted by means of a red-hot poker, or burning coal applied to the outside of the tube. When the phosphorus is liquified, small portions of air destined to be examined, and which have been previously measured in a vessel graduated to the cubic inch, or into grains, are introduced into the tube. As soon as the air which is sent up reaches the phosphorus, a combustion will take place, and the mercury will rise again. The combustion continues till the end of the operation; but, for the greater exactness, Mr. Seguin directs the residuum to be heated strongly. When cold, it is introduced into the graduated vessel to ascertain its volume. The difference of the two volumes gives the quantity of the oxygen gas contained in the air subjected to examination.

6. *Berthollet's Eudiometer.*

Instead of the rapid combustion of phosphorus, Berthollet has substituted its spontaneous combustion, which absorbs the oxygen of atmospheric air completely; and, when the quantity of air operated on is small, the process is accomplished in a short time.

Berthollet's apparatus consists of a narrow graduated glass tube, containing the air to be examined, into which is introduced a cylinder, or stick of phosphorus, supported upon a glass rod, while the tube stands inverted in water. The phosphorus should be nearly as long as the tube. Immediately after the introduction of the phosphorus, white vapours are formed which fill the tube; these vapours gradually descend, and become absorbed by the water. When no more white vapours appear, the process is at an end, for all the oxygen gas which was present in the confined quantity of air, has united with the phosphorus; the residuum is the quantity of nitrogen of the air submitted to examination.

This eudiometer, though excellent of the kind, is nevertheless not absolutely to be depended upon; for, as soon as the absorption of oxygen is completed, the nitrogen gas exercises an action upon the phosphorus, and thus its bulk becomes increased. It has been ascertained, that the volume of nitrogen gas is increased by 1-40th part; consequently the bulk of the residuum, diminished by 1-40, gives us the bulk of the nitrogen gas of the air examined; which bulk, subtracted from the original mass of air, gives us the proportion of oxygen gas contained in it. The same allowance must be made in the eudiometer of Seguin.

7. *Davy's Eudiometer.*

Until very lately, the preceding processes were the methods of determining the relative proportions of the two gases which compose our atmosphere.

Some of these methods, though very ingenious, are so extremely slow in their action, that it is difficult to ascertain the precise time at which the operation ceases. Others have frequently involved inaccuracies, not easily removed.

The eudiometer of Davy is not only free from these objections, but the result it offers is always constant; it requires little address, and is very expeditious; the apparatus is portable, simple, and convenient.

Take a small glass tube, graduated into one hundred equi-distant parts; fill this tube with the air to be examined, and plunge it into a bottle, or any other convenient vessel, containing a concentrated solution of green muriate or sulphate of iron, strongly impregnated with nitrous gas. All that is necessary to be done, is to move the tube in the solution a little backwards and forwards; under these circumstances, the oxygen gas contained in the air will be rapidly absorbed, and condensed by the nitrous gas in the solution, in the form of nitrous acid.

N. B. The state of the greatest absorption should be marked, as the mixture afterwards emits a little gas which would alter the result.

This circumstance depends upon the slow decomposition of the nitrous acid (formed during the experiment,) by the oxide of iron, and the consequent production of a small quantity of aëriform fluid (chiefly nitrous gas); which, having no affinity with the red muriate, or sulphate of iron, produced by the combination of oxygen, is gradually evolved and mingled with the residual nitrogen gas. However, the nitrous gas evolved might be abstracted by exposing the residuum to a fresh solution of green sulphate or muriate of iron.

The impregnated solution with green muriate, is more rapid in its operation than the solution with green sulphate. In cases when these salts cannot be obtained in a state of absolute purity, the common sulphate of iron of commerce may be employed. One cubic inch of moderately impregnated solution, is capable of absorbing five or six cubic inches of oxygen, in common processes; but the same quantity must never be employed for more than one experiment.

In all these different methods of analysing air, it is necessary to operate on air of a determinate density, and to take care that the residuum be neither more condensed nor dilated than the air was when first operated on. If these things are not attended to, no dependance whatever can be placed upon the result of the experiments, how carefully soever they may have been performed. It is, therefore, necessary to place the air, before and after the examination, into water of the same temperature. If this, and several other little circumstances have been attended to, for instance, a change in the height of the barometer, &c., we find that air is composed of about 0.21 of oxygen gas, and 0.79 of nitrogen gas by bulk. But as the weight of these two gases is not exactly the same, the proportion of the component parts by weight will differ a little; for as the specific gravity of oxygen is gas to that of nitrogen gas as 8 to 7 nearly, it follows that 100 parts of air are composed *by weight* of about 76 nitrogen gas, and 24 oxygen gas.

The air of this metropolis, examined by means of Davy's eudiometer, was found, in all the different seasons of the year to contain 0.21 of oxygen; and the same was the case with air taken at Islington and Highgate; in the solitary cells in Cold bath fields prison, and on the River Thames. But the quantity of water contained in a given bulk of air from these places, differed considerably.

EUGALENUS, **Severinus**, a physician of Doccum, in Friesland, known chiefly as the author of a treatise on the scurvy, in 1604, which once maintained a considerable character: but the publication of Dr. Lind, pointing out his numerous errors, has entirely superseded it.

EUGE′NIA. (So named by Micheli, in compliment to Prince Eugene of Savoy, who sent him from Germany almost all the plants described by Clusius.) The name of a genus of plants in the Linnæan system. Class, *Icosandria*. Order, *Monogynia*.

Euge′nia caryophylla′ta. The systematic name of the tree which affords the clove. *Caryophyllus aromaticus:* It grows in the East Indies, the Moluccas, &c. The clove is the unexpanded flower, or rather the calyx; it has a strong agreeable smell, and a bitterish, hot, not very pungent, taste. The oil of cloves, commonly met with in the shops, and received from the Dutch, is highly acrimonious, and sophisticated. Clove is accounted the hottest and most acrid of the aromatics; and, by acting as a powerful stimulant to the muscular fibres, may, in some cases of atonic gout, paralysis, &c. supersede most others of the aromatic class; and the foreign oil, by its great acrimony, is also well adapted for several external purposes: it is directed by several pharmacopœias, and the clove itself enters many officinal preparations.

Euge′nia ja′mbos. The systematic name of the Malabar plum-tree. The *Malabar plum*, which is the produce of the *Eugenia jambos*, smells, when ripe, like roses. On the coast of Malabar, where the trees grow plentifully, these plums are in great esteem. They are not only eaten fresh off the trees, but are preserved in sugar, in order to have them eatable all the year. Of the flowers, a conserve is prepared, which is used medicinally, as a mild adstringent.

Euge′us. (From ευ, well, and γη, the earth; so called because of its fertility.) The uterus.

Eu′lf. (From ευλαζω, to putrefy.) A worm bred in foul and putrid ulcers.

Eunu′chium. (From ευνουχος, an eunuch; so called because it was formerly said to render those who eat it impotent, like an eunuch.) The lettuce.

Eupatoriopha′lacron. (From ευπατωριον, agrimony, and φαλακρος, bald.) A species of agrimony with naked heads.

EUPATO′RIUM. (From *Eupator*, its discoverer: or *quasi hepatorium*, from ηπαρ, the liver; because it was said to be useful in diseases of the liver.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*.

2. The pharmacopœial name of the *Eupatorium cannabinum;* which see.

Eupato′rium ara′bicum. See *Eupatorium cannabinum*.

Eupato′rium canna′binum. The systematic name of the hemp agrimony. *Eupatorium. Eupatorium Arabicum.* This very bitter and strong smelling plant, is the *Eupatorium foliis digitatis*, of Linnæus. Its juice proves violently emetic and purgative, if taken in sufficient quantity, and promotes the secretions generally. It is recommended in dropsies, jaundices, agues, &c. and is in common use in Holland, amongst the lower orders, as a purifier of the blood in old ulcers, scurvy, and anasarca.

Eupato′rium me′sues. See *Achillea ageratum*.

Eupe′psia. (From ευ, well, and πεπτω, to concoct. A good digestion.

Eupe′ptic. (*Eupeptica;* from ευ, good, and πεπτω, to digest.) Substances are so called that are easy to digest.

EUPHO′RBIA. The name of a genus of plants in the Linnæan system. Class, *Dodecandria*. Order, *Trigynia*.

Eupho′rbia antiquo′rum. The Linnæan name of a plant supposed to produce the *Euphorbium*.

Eupho′rbia canarie′nsis. In the Canary islands this species of spurge affords the gum euphorbium.

Eupho′rbia cypari′ssias. The systematic name of the cypress spurge. *Esula minor. Tithymalus cyparissius.* Cypress spurge. This, like most of the spurges, is very acrimonious, inflaming the eyes and œsophagus after touching them. It is now fallen into disuse, whatever were its virtues formerly, which, no doubt, amongst some others, was that of opening the bowels; for, amongst rustics, it was called poor man's rhubarb.

Eupho′rbia la′thyris. The systematic name of the plant which affords the lesser cataputia seeds. *Cataputia minor*, the *Euphorbia lathyris; umbella quadrifida, dichotoma, foliis oppositis integerrimis* of Linnæus. The seeds possess purgative properties; but if exhibited in an over-dose, prove drastic and poisonous: a quality peculiar to all the *euphorbiæ*.

Eupho′rbia officina′rum. The systematic name of the plant which affords the euphorbium in the greatest abundance. Euphorbium is an inodorus gum-resin, in yellow tears, which have the appearance of being worm-eaten; said to be obtained from several species of euphorbiæ, but principally from the *Euphorbia officinarum; aculatea nuda multangularis, aculeis germinatis*, of Linnæus: it is imported from Ethiopia, Libya, and Mauritania. It contains an active resin, and is very seldom employed internally, but, as an ingredient, it enters into many resolvent and discutient plasters.

Eupho′rbia palu′stris. The systematic name of the greater spurge. *Esula major.* The officinal plant ordered by this name in some pharmacopœias, is the *Euphorbia palustris: umbella multifida, bifida, involucellis ovatis, foliis lanceolatis, ramis sterilibus*, of Linnæus. The juice is exhibited in Russia as a common purge; and the plant is given, in some places, in the cure of intermittents.

Eupho′rbia para′lias. *Tithymalus paralios.* Sea spurge. Every part of this plant, *Euphorbia paralias* of Linnæus, is violently cathartic and irritating, inflaming the mouth and fauces. It is seldom employed in the practice of this country; but where it is used vinegar is recommended to correct its irritating power.

EUPHO′RBIUM. (From *Euphorbus*, the physician of king Juba, in honour of whom it was named.) See *Euphorbia officinarum.*

EUPHRA′SIA. (Corrupted from *Euphrosyne*, *ευφροσυνη*, from *ευφρων*, joyful; so called because it exhilarates the spirits.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Angiospermia.*

2. The pharmacopœial name of eye-bright. See *Euphrasia officinalis.*

Euphra′sia officina′lis. The systematic name of the eye-bright. This beautiful little plant, *Euphrasia officinali; foliis ovatis, lineatis, argute dentatis*, of Linnæus, has been greatly esteemed by the common people, as a remedy for all diseases of the eyes; yet, notwithstanding this, and the encomiums of some medical writers, is now wholly fallen into disuse. It is an ingredient in the British herb-tobacco.

EUSTA′CHIAN TUBE. *Tuba Eustachiana.* The tube so called was discovered by the great Eustachius. It begins, one in each ear, from the anterior extremity of the tympanum, and runs forwards and inwards in a bony canal, which terminates with the petrous portion of the temporal bone. It then goes on, partly cartilaginous, and partly membranous, gradually becoming larger, and at length ends behind the soft palate. Through this tube the air passes to the tympanum.

Eustáchian valve. See *Valvula Eustachii.*

EUSTACHIUS, Bartholomew, one of the most celebrated anatomists of the 16th century, was born at San Severino in Italy. He studied at Rome, and made himself such a proficient in anatomy, that he was chosen professor of that branch of medicine there, where he died in 1574. He was author of several works, many of which are lost, especially his treatise "De Controversiis Anatomicorum," which is much regretted. He made several discoveries in anatomy; having first described the renal capsules, and the thoracic duct; also the passage from the throat to the internal ear, named after him the Eustachian tube. A series of copper plates, to which he alludes in his "Opuscula," were recovered by Lancisi, and published in the beginning of the 18th century. He edited the Lexicon of Erotian with a commentary.

Euthypo′ria. (From *ευθυς*, straight, and *πορος*, a passage.) *Euthyporos.* An extension made in a straight line, to put in place a fracture, or dislocation.

EVAPORA′TION. The volatilization of a fluid, by means of heat, with access of air, in order to diminish its fluidity, to obtain any fixed salts it may hold in solution, or to diminish the quantity of a residuum. In this manner sea water is evaporated, and the salt obtained, and decoctions made into extracts.

Everri′culum. (From *everro*, to sweep away.) A sort of spoon, used to clear the bladder from gravel.

EXACERBA′TION. (From *exacerbo*, to become violent.) An increase of febrile symptoms.

Exæ′resis. (From *εξαιρεω*, to remove.) One of the divisions of surgery, adopted by the old surgeons; the term implies the removal of parts.

Exa′lma. (From *εξαλλομαι*, to leap out.) Hippocrates applies it to the starting of the vertebræ out of their places.

Examelo′ma. (From εξαμβλοω, to miscarry.) An abortion.

Examblo′sis. An abortion.

Exanastomo′sis. (From εξαναστομοω, to relax, or open.) The opening of the mouths of vessels, to discharge their contents; also the meeting of the extremities of the veins and arteries.

EXANTHE′MA. (From εξανθεω, to spring forth, to bud.) *Exanthisma.* An eruption of the skin.

EXANTHE′MATA. (The plural of *exanthema.*) The name of an order of diseases of the class *pyrexiæ* in Cullen's Nosology. It includes diseases, beginning with fever, and followed by an eruption on the skin.

Exanthi′sma. See *Exanthema.*

Exanthro′pia. (From εξ, without, and ανθρωπος, a man, *i. e.* having lost the faculties of a man.) A species of melancholy, where the patient fancies himself some kind of brute.

Exara′gma. (From εξαραττω, to break.) A fracture.

Exa′rma. (From εξαιρω, to lift up.) A tumour; a swelling.

Exarte′ma. (From εξαρταω, to suspend.) An amulet, or charm, hung round the neck.

Exarthre′ma. (From εξαρθροω, to put out of joint.) *Exarthroma. Exarthrosis.* A dislocation, or luxation.

Exarthro′ma. See *Exarthrema.*

Exarthro′sis. See *Exarthrema.*

Exarticula′tio. (From *ex,* out of, and *articulus,* a joint.) A luxation, the dislocation of a bone from its socket.

Exci′pulum. (From *excipio,* to receive.) A chemical receiver.

EXCITABI′LITY. See *Excitement.*

EXCI′TEMENT. A term introduced into medicine by Dr. Brown. Animals, differ from themselves in their dead state, or from any other inanimate matter, in this property alone; *they can be affected by external agents, as well as by certain functions peculiar to themselves in such a manner, that the phenomena peculiar to the living state can be produced.* This proposition extends to every thing that is vital in nature, and therefore applies to vegetables.

The external agents are reducible to heat, diet, and other substances taken into the stomach, blood, the fluids secreted from the body and air.

The functions of the system itself, producing the same effect, are muscular contraction, sense, or perception, and the energy of the brain in thinking, and in exciting passion and emotion. These affect the system in the same manner as the other agents; and they arise both from the other and from themselves.

If the property which distinguishes living from dead matter, or the operation of either of the two sets of powers be withdrawn, life ceases. Nothing else than the presence of these is necessary to life.

The property on which both sets of powers act Dr. Brown names *Excitability,* and the powers themselves exciting powers. The word body, means both the body simply so called, and also as endued with an intellectual part, a part appropriated to passion and emotion, or a soul: the usual appellation in medical writings is system.

The effects common to all the exciting powers, are sense, motion, mental exertion, and passion. Their effects being the same, it must be granted, that the operation of all their powers is the same.

The effects of the exciting powers acting upon the excitability, Dr. Brown denominates *excitement.*

EXCI′TING CAUSE. Occasional cause. Procatarctic cause. Remote cause. That which, when applied to the body, excites a disease. The exciting, or remote causes of diseases, are either external or internal.

EXCORIA′TION. (From *excorio,* to take off the skin.) *Excoriatio.* An abrasion of the skin.

E′XCREMENT. (From *excerno,* to separate from.) The alvine fæces.

EXCRE′SCENCE. (From *excresco,* to grow from.) *Excrescentia.* Any preternatural formation of flesh, or any part of the body, as wens, warts, &c.

EXCRE′TION. (From *excerno,* to separate from.) *Excretio.* This term is applied to the separation or secretion of those fluids from the blood of an animal, that are supposed to be useless, as the urine, perspiration, and alvine fæces.

EXFOLIA′TION. (From *exfolio,* to cast the leaf.) *Exfoliatio.* The separation of a dead piece of bone from the living.

Exfoliati′vum. (From *exfolio,* to shed the leaf.) A raspatory or instrument for scraping exfoliating portions of bone.

Exi′schios. (From εξ, out of, and ισχιον, the ischium.) A luxation of the thigh-bone.

Exitu′ra. (From *exeo,* to come from.) A running abscess.

E′xitus. (From *exeo,* to come out.) A prolapsus, or falling down of the womb or anus.

E′xochas. (From εξω, without, and εχω, to have.) *Exoche.* A tubercle on the outside of the anus.

E′xoche. See *Exochas.*

Exocy′ste. See *Exocystis.*

Exocy′stis. (From εξω, without, and κυσις, the bladder.) *Exocyste.* A prolapsus of the inner membrane of the bladder.

EXO′MPHALUS. (From εξ, out, and ομφαλος, the navel.) *Exomphalos.* An umbilical hernia. See *Hernia.*

Exoncho′ma. (From εξ, and ογκος, a tumour.) A large prominent tumour.

EXOPHTHA'LMIA. (From εξ, out, and οφθαλμος, the eye.) A swelling or protrusion of the bulb of the eye, to such a degree that the eye-lids cannot cover it. It may be caused by inflammation, when it is termed *exophthalmia inflammatoria*; or from a collection of pus in the globe of the eye, when it is termed the *exophthalmia purulenta*; or from a congestion of blood within the globe of the eye, *exophthalmia sanguinea*.

EXOSTO'SIS. (From εξ, and οστεον, a bone.) *Hyperostosis*. A morbid enlargement, or hard tumour of a bone. A genus of disease arranged by Cullen in the class *locales*, and order *tumores*. The bones most frequently affected with extososis, are those of the cranium, the lower jaw, sternum, humerus, radius, ulna, bones of the carpus, the femur, and tibia. There, is however, no bone of the body, which may not become the seat of this disease. It is not uncommon to find the bones of the cranium affected with exostosis, in their whole extent. The ossa parietalia sometimes become an inch thick.

The exostosis, however, mostly rises from the surface of the bone, in the form of a hard round tumour; and venereal exostoses, or nodes, are observed to arise chiefly on compact bones, and such of these as are only superficially covered with soft parts; as, for instance, the bones of the cranium, and the front surface of the tibia.

EXPE'CTORANTS. (*Expectorantia*, sc. *medicamenta*, from *expectoro*, to discharge from the breast.) Those medicines which increase the discharge of mucus from the lungs. The different articles referred to this class may be divided into the following orders: 1. *Nauseating expectorants*, as squill, ammoniacum, and garlic, which are to be preferred for the aged and phlegmatic. 2. *Stimulating expectorants*, as marrubium, which is adapted to the young and irritable, and those easily affected by expectorants. 3. *Antispasmodic expectorants*, as vesicatories, pediluvium, and watery vapours; these are best calculated for the plethoric and irritable, and those liable to spasmodic affections. 4. *Irritating expectorants*, as fumes of tobacco and acid vapours. The constitutions to which these are chiefly adapted, are those past the period of youth, and those in whom there are evident marks of torpor, either in the system generally, or in the lungs, in particular.

EXPIRA'TION. (From *expiro*, to breathe.) *Expiratio*. That part of respiration in which the air is thrust out from the lungs. See *Respiration*.

Expre'ssed oils. Such oils as are obtained by pressing the substance containing them, as olives, which give out olive oil, almonds, &c.

Exsucca'tio. (From *ex*, out of, and *succus*, humour.) An ecchymosis, or extravasation of humours, under the integuments.

EXTE'NSOR. (From *extendo*, to stretch out.) A term given to those muscles whose office it is to extend any part; the term is in opposition to flexor.

EXTE'NSOR BRE'VIS DIGITO'RUM PE'DIS. *Extensor brevis* of Douglas. *Calcano phalanginien commune* of Dumas. A muscle of the toes situated on the foot. It arises fleshy and tendinous from the fore and upper part of the os calcis, and soon forms a fleshy belly, divisible into four portions, which send off an equal number of tendons that pass over the upper part of the foot, under the tendons of the extensor longus digitorum pedis, to be inserted into its tendinous expansion. Its office is to extend the toes.

EXTE'NSOR CA'RPI RADIA'LIS BRE'VIOR. *Radialis externus brevior* of Albinus. *Radialis secundus* of Winslow. An extensor muscle of the wrist, situated on the fore-arm. It arises tendinous from the external condyle of the humerus, and from the ligament that connects the radius to it, and runs along the outside of the radius. It is inserted by a long tendon into the upper and back part of the metacarpal bone of the middle finger. It assists in extending and bringing the hand backward.

EXTE'NSOR CA'RPI RADIA'LIS LO'NGIOR. *Radialis externus longior* of Albinus. *Radialis externus primus* of Winslow. An extensor muscle of the carpus, situated on the fore-arm, that acts in conjunction with the former. It arises thin, broad, and fleshy, from the lower part of the external ridge of the os humeri, above its external condyle, and is inserted by a round tendon into the posterior and upper part of the metacarpal bone that sustains the fore-fingers.

EXTE'NSOR CA'RPI ULNA'RIS. *Ulnaris externus* of Albinus and Winslow. It arises from the outer condyle of the os humeri, and then receives an origin from the edge of the ulna: its tendon passes in a groove behind the styloid process of the ulna to be inserted into the inside of the basis of the metacarpal bone of the little finger.

EXTE'NSOR DIGITO'RUM COMMU'NIS. *Cum extensore proprio auricularis* of Albinus. *Extensor digitorum communis manus* of Douglas and Winslow. *Extensor digitorum communis, seu digitorum tensor* of Cowper, and *Epichondylo-susphalangettien commune* of Dumas. A muscle situated on the fore-arm, that extends all the joints of the fingers. It arises from the external protuberance of the humerus: and at the wrist it divides into three flat tendons, which pass under the annular ligament, to be inserted into all the bones of the fore, middle, and ring fingers.

EXTE'NSOR DIGITO'RUM LO'NGUS. See *Extensor longus digitorum pedis.*

EXTE'NSOR I'NDICIS. See *Indicator.*

EXTE'NSOR LO'NGUS DIGITO'RUM PE'DIS. *Extensor digitorum longus. Peroneo tibisus phalangittien commune* of Dumas. A muscle situated on the leg, that extends all the joints of the four small toes. It arises from the upper part of the tibia and fibula, and the interrosseous ligament; its tendon passes under the annular ligament, and then divides into five, four of which are inserted into the second and third phalanges of the toes, and the fifth goes to the basis of the metatarsal bone. This last, Winslow reckons a distinct muscle, and calls it *Peroneus brevis.*

EXTE'NSOR LO'NGUS PO'LLICIS PE'DIS. See *Extensor proprius pollicis pedis.*

EXTE'NSOR MA'GNUS. See *Gastrocnemius internus.*

EXTE'NSOR MA'JOR PO'LLICIS MA'NUS. See *Extensor secundi internodii.*

EXTE'NSOR MI'NOR PO'LLICIS MA'NUS. See *Extensor primi internodii.*

EXTE'NSOR O'SSIS METACA'RPI PO'LLICIS MA'NUS. *Abductor longus pollicis manus* of Albinus. *Extensor primi internodii* of Douglas. *Extensor primus pollicis* of Winslow. *Extensor primi internodii pollicis* of Cowper. *Cubito-radisus metacarpien du pouce* of Dumas. It arises fleshly from the middle and posterior part of the ulna, from the posterior part of the middle of the radius, and from the interosseous ligament, and is inserted into the os trapezium, and upper part of the metacarpal bone of the thumb.

EXTE'NSOR PO'LLICIS PRI'MUS. See *Extensor primi internodii.*

EXTE'NSOR PO'LLICIS SECU'NDUS. See *Extensor secundi internodii.*

EXTE'NSOR PRI'MI INTERNO'DII. *Extensor minor pollicis manus* of Albinus. This muscle, and the *Extensor ossis metacarpi pollicis manus,* are called *Extensor pollicis primus* by Winslow. *Extensor secundi internodii* by Douglas. *Extensor secundi internodii ossis pollicis* of Cowper. *Cubito-susphalangien du pouce* of Dumas. A muscle of the thumb situated on the hand, that extends the first bone of the thumb obliquely outwards. It arises fleshy from the posterior part of the ulna, and from the interrosseous ligament, and is inserted tendinous into the posterior part of the first bone of the thumb.

EXTE'NSOR PRO'PRIUS PO'LLICIS PE'DIS. *Extensor longus* of Douglas. *Extensor pollicis longus* of Winslow and Cowper. *Peroneo susphalangien du pouce* of Dumas. An exterior muscle of the great toe, situated on the foot. It arises by an acute, tendinous, and fleshy beginning, some way below the head, and anterior part of the fibula, along which it runs to near its lower extremity, connected to it by a number of fleshy fibres, which descend obliquely, and form a tendon, which is inserted into the posterior part of the first and last joint of the great toe.

EXTE'NSOR SECU'NDI INTERNO'DII. *Extensor major pollicis manus* of Albinus. *Extensor pollicis secundus* of Winslow. *Extensor tertii internodii* of Douglas. *Extensor internodii ossis pollicis* of Cowper. *Cubito susphalangettien du pouce* of Dumas. A muscle of the thumb, situated on the hand, that extends the last joint of the thumb obliquely backwards. It arises tendinous and fleshy from the middle part of the ulna, and interosseous ligament; it then forms a tendon, which runs through a small groove at the inner and back part of the radius, to be inserted into the last bone of the thumb. Its use is to extend the last phalanx of the thumb obliquely backwards.

EXTE'NSOR SECU'NDI INTERNO'DII I'NDICIS PRO'PRIUS. See *Indicator.*

EXTE'NSOR TA'RSI MI'NOR. See *Plantaris.*

EXTE'NSOR TA'RSI SURA'LIS. See *Gastrocnemius internus.*

EXTE'NSOR TE'RTII INTERNO'DII MI'NIMI DI'GITI. See *Abductor minimi digiti manus.*

EXTE'NSOR TE'RTII INTERNO'DII I'NDICIS. See *Prior indicis.*

EXTE'RNUS MA'LLEI. See *Laxator tympani.*

EXTIRPA'TION. (From *extirpo,* to eradicate.) *Extirpatio.* The complete removal or destruction of any part, either by cutting instruments, or the action of caustics.

EXTRA'CTION. (From *extraho,* to draw out.) *Extractio.* The taking extraneous substances out of the body. Thus bullets and splinters are said to be *extracted* from wounds; stones from the urethra, or bladder.

Surgeons also sometimes apply the term *extraction* to the removal of tumours out of cavities, as, for instance, to the taking of cartilaginous tumours out of the joints. They seldom speak of extracting any diseased original part of the body; though they do so in one example, viz. the cataract.

E'XTRACT. (*Extractum;* from *extraho,* to draw out.) The generic term extract is used pharmaceutically, in an extensive sense, and includes all those preparations from vegetables which are separated by the agency of various liquids, and afterwards obtained from such solutions, in a solid state, by evaporation of the menstruum. It also includes those substances which are held in solution by the natural juices of fresh plants, as well as those to which some menstruum is added at the time of preparation. Now, such soluble matters are various, and mostly complicated; so that chemical accuracy is not to be looked for in the application of the term. Some chemists, however, have affixed this name to one peculiar modification of vegetable matter, which has been called *extractive*, or extract, or extractive principle; and, as this forms one constituent part of common extracts, and possesses certain characters, it will be proper to mention such of them as may influence its pharmaceutical relations. The extractive principle has a strong taste, differing in different plants: it is soluble in water, and its solution speedily runs into a state of putrefaction, by which it is destroyed. Repeated evaporations and solutions render it at last insoluble, in consequence of its combination with oxygen from the atmosphere. It is soluble in alkohol, but insoluble in ether. It unites with alumine, and if boiled with neutral salts thereof, precipitates them. It precipitates with strong acids, and with the oxides from solutions of most metallic salts, especially muriate of tin. It readily unites with alkalies, and forms compounds with them, which are soluble in water. No part, however, of this subject has been hitherto sufficiently examined.

In the preparation of all the extracts, the London Pharmacopœia requires that the water be evaporated as speedily as possible, in a broad, shallow dish, by means of a water-bath, until they have acquired a consistence proper for making pills; and, towards the end of the inspissation, that they should be constantly stirred with a wooden rod. These general rules require minute and accurate attention, more particularly in the immediate evaporation of the solution, whether prepared by expression or decoction, in the manner as well as the degree of heat by which it is performed, and the promotion of it by changing the surface by constant stirring, when the liquor begins to thicken, and even by directing a strong current of air over its surface, if it can conveniently be done. It is impossible to regulate the temperature over a naked fire, or, if it be used, to prevent the extract from burning; the use of a water bath is, therefore, absolutely necessary, and not to be dispensed with, and the beauty and precision of extracts so prepared, will demonstrate their superiority.

EXTRA'CTIVE. See *Extract*.

Extra'ctum aconi'ti. Extract of aconite. "Take of aconite leaves, fresh a pound; bruise them in a stone mortar, sprinkling on a little water; then press out the juice, and, without any separation of the sediment, evaporate it to a proper consistence." The dose is from one grain to five grains. For its virtues see *Aconitum*.

Extra'ctum a'loes purifica'tum. Purified extract of aloes. "Take of extract of spike aloe, powdered, half a pound; boiling water, four pints. Macerate for three days in a gentle heat, then strain the solution, and set it by, that the dregs may subside. Pour off the clear solution, and evaporate it to a proper consistence." The dose, from five to xv grs. See *Aloës.*

Extra'ctum anthe'midis. Extract of chamomile, formerly called extractum chamæmeli. "Take of chamomile flowers, dried, a pound. Water, a gallon. Boil down to four pints, and strain the solution while it is hot, then evaporate it to a proper consistence." The dose is x grs. to a scruple. For its virtues, see *Anthemis nobilis.*

Extra'ctum bellado'nnæ. Extract of belladonna. "Take of deadly night shade leaves, fresh, a pound. Bruise them in a stone mortar, sprinkling on a little water; then press out the juice, and without any previous separation of the sediment, evaporate it to a proper consistence." The dose is from one to five grains. For its virtues, see *Atropa Belladonna*.

Extra'ctum cincho'næ. Extract of bark. "Take of lance-leaved cinchona bark, bruised, a pound; water a gallon. Boil down to six pints, and strain the liquor, while hot. In the same manner, with an equal quantity of water, four times boil down, and strain. Lastly consume all the liquors, mixed together, to a proper consistence. This extract should be kept soft, for making pills, and hard to be reduced to powder."

Extra'ctum cincho'næ resino'sum. Resinous extract of bark. "Take of lance-leaved cinchona bark, bruised, a pound; rectified spirit, four pints. Macerate for four days and strain. Distil the tincture in the heat of a water-bath, until the extract has acquired a proper consistence." This is considered by many as much more grateful to the stomach, and, at the same time, producing all the effects of bark in substance, and by the distillation of it, it is intended that the spirit which passes over shall be collected and preserved. The dose is from ten grains to half a drachm. See *Cinchona*.

Extra'ctum colocy'nthidis. Extract of colocynth. "Take of colocynth pulp, a pound; water, a gallon. Boil down to four pints, and strain the solution while it is hot, and evaporate it to a proper consistence." The dose is from five to thirty grains. For its virtues, see *Cucumis colocynthis*.

Extra'ctum coloc'ynthidis compo'situm. Compound extract of colocynth. "Take of colocynth pulp, sliced, six drachms; extract of spike aloe, powdered, an ounce and half; scammony gum-resin powdered, half an ounce; cardamom seeds powdered, a drachm; proof spirit; a pint. Macerate the colocynth pulp in the spirit, for four days, in a gentle heat: strain the solution, and add it to the aloes and scammony; then, by means of a water-bath, evaporate it to a proper consistence, constantly stirring and about the end of the inspissation, mix in the cardamom-seeds." The dose from five to thirty grains.

Extra′ctum coni′i. Extract of hemlock, formerly called succus cicutæ spissatus. "Take of fresh hemlock, a pound. Bruise it in a stone mortar, sprinkling on a little water; then press out the juice, and, without any separation of the sediment, evaporate it to a proper consistence." The dose from five grains to a scruple.

Extra′ctum elate′rii. Extract of elaterium. "Cut the ripe, wild cucumbers into slices, and pass the juice, very gently expressed, through a very fine hair sieve, into a glass vessel; then set it by for some hours, until the thicker part has subsided. Pour off, and throw away the thinner part, which swims at the top. Dry the thicker part which remains in a gentle heat." The dose, from half a grain to three grains. For its virtues, see *Momordica Elaterium.*

Extra′ctum gentia′næ. Extract of gentian. "Take of gentian root, sliced, a pound; boiling water, a gallon. Macerate for twenty-four hours, then boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." Dose from ten to thirty grains. See *Gentiana.*

Extra′ctum glycyrrhi′zæ. Extract of liquorice. "Take of liquorice root, sliced, a pound; boiling water, a gallon. Macerate for twenty-four hours, then boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." Dose, from one drachm to half an ounce. See *Glycyrrhiza.*

Extra′ctum hæmato′xyli. Extract of logwood, formerly called extractum ligni campechensis. "Take of logwood, powdered, a pound; boiling water, a gallon. Macerate for twenty-four hours, then boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." Dose from ten grains to half a drachm. For its virtues, see *Hæmatoxylon campechianum.*

Extra′ctum hu′muli. Extract of hops, "Take of hops, four ounces; boiling water, a gallon. Boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." This extract is said to produce a tonic and sedative power combined. The dose is from five grains to one scruple. See *Humulus Lupulus.*

Extra′ctum hyoscy′ami. Extract of henbane. "Take of fresh henbane leaves, a pound. Bruise them in a stone mortar, sprinkling on a little water; then press out the juice, and, without separating the fæculencies, evaporate it to a proper consistence." Dose from five to thirty grains. For its virtues, see *Hyoscyamus.*

Extra′ctum jala′pæ. Extract of jalap. "Take of jalap-root powdered, a pound; rectified spirit, four pints; water, ten pints. Macerate the jalap root in the spirit for four days, and pour off the tincture; boil the remaining powder in the water, until it be reduced to two pints; then strain the tincture and decoction separately, and let the former be distilled and the latter evaporated, until each begins to grow thick. Lastly, mix the extract with the resin, and reduce it to a proper consistence. Let this extract be kept in a soft state, fit for forming pills, and in a hard one, so that it may be reduced to powder." The dose, from ten to twenty grains. For its virtues, see *Convolvulus jalapa.*

Extra′ctum o′pii. Extract of opium, formerly called extractum thebaicum. Opium colatum. "Take of opium, sliced, half a pound; water, three pints. Pour a small quantity of the water upon the opium, and macerate it for twelve hours, that it may become soft; then, adding the remaining water gradually, rub them together until the mixture be complete. Set it by, that the fæculencies may subside; then strain the liquor, and evaporate it to a proper consistence." Dose, from half a grain to five grains.

Extra′ctum papa′veris. Extract of white poppy. "Take of white poppy capsules bruised, and freed from the seeds, a pound; boiling water, a gallon. Macerate for twenty-four hours, then boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." Six grains are about equivalent to one of opium. For its virtues, see *Papaver album.*

Extra′ctum rhe′i. Extract of rhubarb. "Take of rhubarb root, powdered, a pound; proof spirit, a pint; water, seven pints. Macerate for four days in a gentle heat, then strain and set it by, that the fæculencies may subside. Pour off the clear liquor, and evaporate to a proper consistence." This extract possesses the purgative properties of the root, and the fibrous and earthy parts are separated; it is, therefore, a useful basis for pills, as well as given separately. Dose, from ten to thirty grains. See *Rheum.*

Extra′ctum sarsapari′llæ. Extract of sarsaparilla. "Take of sarsaparilla root, sliced, a pound; boiling water, a gallon. Macerate for twenty-four hours, then boil down to four pints; strain the hot liquor, and evaporate it to a proper consistence." In practice this is much used, to render the common decoction of the same root stronger and more efficacious. Dose from ten grains to a drachm. For its virtues, see *Smilax sarsaparilla.*

Extra′ctum satu′rni. See *Plumbi subacetatis liquor.*

Extra′ctum tara′xaci. "Take of dandelion root, fresh and bruised, a pound; boiling water, a gallon. Macerate for twenty-four hours; boil down to four pints, and strain the hot liquor; then evaporate it to a proper consistence." Dose, from ten grains to a drachm. For its virtues, see *Leontodon Taraxacum.*

EXTRAVASATION. (From *extra*, without, and *vas*, a vessel.) *Extravasatio.* A term applied by surgeons to fluids, which are out of their proper vessels, or receptacles. Thus, when blood is effused on the surface, or in the ventricles of the brain, it is said that there is an extravasation. When blood is poured from the vessels into the cavity of the peritoneum, in wounds of the abdomen, surgeons call this accident *extravasation.* The urine is also said to be *extravasated*, when, in consequence of a wound, or of sloughing, or ulceration, it makes its way into the cellular substance or among the abdominal viscera. When the bile spreads among the convolutions of the bowels, in wounds of the gall-bladder it is also a species of extravasation.

EYE. *Oculus.* The parts which constitute the eye are divide into external and internal. The external parts are:

1. The *eyebrows*, or *supercilia*, which form arches of hair above the orbit, at the lower part of the forehead. Their use is to prevent the sweat falling into the eyes, and for moderating the light above.

2. The eyelashes, or *cilia*, are the short hairs that grow on the margin of the eyelids; they keep external bodies out of the eyes, and moderate the influx of light.

3. The eyelids, or *palpebræ*, of which, one is superior or upper, and the other inferior, or under; where they join outwardly, it is called the *external canthus*; inwardly, towards the nose, the *internal canthus*; they cover and defend the eyes.

The margin of the eyelids, which is cartilaginous, is called *tarsus.*

In the *tarsus*, and internal surface of the eyelids, small glands are situated, called *glandulæ Meibomianæ*, because Meibomius discovered them; they secrete an oily or mucilaginous fluid, which prevents the attrition of the eyes and eyelids, and facilitates their motions.

4. The lachrymal glands, or *glandulæ lachrymales*, which are placed near the external canthus, or corner of the eyes, in a little fovea of the os frontis.

From these glands six or more canals issue, which are called lachrymal ducts, or *ductus lachrymales*, and they open on the internal surface of the upper eyelid.

5. The lachrymal caruncle, or *caruncula lachrymalis*, which is situated in the internal angle, or canthus of the eyelids.

6. *Puncta lacrymalia*, are two callous orifices or openings, which appear at the internal angle of the tarsus of the eyelids; the one in the superior, the other in the inferior eyelid.

7. The lachrymal ducts or *canales lachrymales*, are two small canals, which proceed from the lachrymal points into the lachrymal sac.

8. The lachrymal sac, or *saccus lachrymalis*, is a membranous sac, which is situated in the internal canthus of the eye.

9. The nasal duct, or *ductus nasalis*, is a membranous canal, which goes from the inferior part of the lachrymal sac through the bony canal below, and a little behind, into the cavity of the nose, and opens under the inferior spongy bone into the nostrils.

10. The conjunctive membrane, or *membrana conjunctiva*, which, from its white colour, is called also *albuginea*, or white of the eye, is a membrane which lines the internal superficies of the eyelids, and covers the whole fore-part of the globe of the eye; it is very vascular, as may be seen in inflammations.

The bulb, or globe of the eye, is composed of eight membranes, or coverings, two chambers, or *cameræ*, and three humours, improperly so called.

The membranes of the globe of the eye, are, *four* in the hinder or posterior part of the bulb, or globe, viz. *sclerotica*, *choroidea*, *retina*, and *hyaloidea*, or *arachnoidea*; *four* in the fore or anterior part of the bulb, viz. *cornea transparens*, *iris*, *uvea*, and *capsule of the crystalline lens.*

The *membrana sclerotica*, or the sclerotic or horny membrane, which is the outermost, begins from the optic nerve, forms the spherical or globular cavity, and terminates in the circular margin of the transparent cornea.

The *membrana choroidea*, or *choroides*, is the middle tunic of the bulb, of a black colour, beginning from the optic nerve, and covering the internal superficies of the sclerotica, to the margin of the transparent cornea. In this place it secedes from the cornea, and deflects transversely and inwardly, and in the middle forms a round foramen. This circular continuation of the choroidea in the anterior surface is called *iris*, in the posterior superficies, *uvea.*

The round opening in the centre is called the *pupil*, or *pupilla*. This foramen, or round opening, can be dilated, or contracted, by the moving powers of almost invisible muscular fibres.

The *membrana retina*, is the innermost tunic of a white colour, and similar to mucus, being an expansion of the optic nerve, chiefly composed of its medullary part. It covers the inward superficies of the choroides, to the margin of the crystalline lens, and there terminates.

The *chambers*, or *cameræ* of the eyes are:

1. *Camera anterior*, or fore-chamber; an open space, which is formed anteriorly, by the hollow surface of the *cornea transparens*, and posteriorly, by the surface of the *iris.*

2. *Camera posterior,* that small space which is bounded anteriorly by the *tunica uvea,* and *pupilla,* or pupil; posteriorly by the anterior surface of the crystalline lens.

Both these chambers are filled with aqueous humour. The humours of the eye, as they are called, are in number three:

1. The *aqueous humour,* which fills both chambers.

2. The *crystalline lens,* or humour, is a pellucid body, about the size of a lentil, which is included in an exceedingly fine membrane, or *capsula,* and lodged in a concave fovea of the vitreous humour.

3. The *vitreous humour,* is a pellucid, beautifully transparent substance, which fills the whole bulb of the eye behind the crystalline lens. Its external surface is surrounded with a most pellucid membrane, which is called *membrana hyaloidea,* or *arachnoidea.* In the anterior part is a fovea, or bed, for the crystalline lens.

The connection of the bulb is made anteriorly, by means of the conjunctive membrane, with the inner surface of the eyelids, or *palpebræ;* posteriorly, by the adhesion of six muscles of the bulb and the optic nerve, with the orbit.

The optic nerve, or *nervus opticus,* perforates the sclerotica and choroides, and then constitutes the retina, by spreading itself on the whole posterior part of the internal globe of the eye.

The muscles by which the eye is moved in the orbit, are six; much adeps surrounds them, and fills up the cavities in which the eyes are seated. The arteries are the internal orbital, the central, and the ciliary arteries. The veins empty themselves into the external jugulars. The nerves are the optic, and branches from the third, fourth, fifth, and sixth pair.

The use of the eye is to form the organ of vision.

Externally, the globe of the eye and the transparent cornea, are moistened with a most limpid fluid, called *lachrymæ,* or tears; the same pellucid subtile fluid exactly fills all the pores of the transparent cornea; for, deprived of this fluid, and being exposed to the air, that coat of the eye becomes dry, shrivelled, and cloudy, impeding the rays of light.

Eye-bright. See *Euphrasia.*

EYE-BROW. *Supercilium.* A layer of short hair, which lies thick upon the integuments covering the superior prominent part of the orbit.

EYE-LID. *Palpebra.* The semi-lunar moveable production of the skin which covers the eye when shut. It is distinguished into upper and under eye-lid.

F.

F. or ft. In a prescription these letters are abbreviations of *fiat,* or *fiant,* let it, or them be made; thus *f. bolus,* let the substance or substances prescribed be made into a bolus.

FA´BA. See *Bean.*

FA´BA CRA´SSA. See *Sedum telephium.*

FA´BA ÆGYPTI´ACA. See *Nymphæa Nelumbo.*

FA´BA FEBRI´FUGA. See *Ignatia amara.*

FA´BA I´NDICA. See *Ignatia amara.*

FA´BA MA´JOR. The Turkey or garden bean. See *Bean.*

FA´BA MI´NOR. *Equina frasa.* The horse-bean. It differs no otherwise from the garden bean than in being less.

FA´BA PECHU´RIM. *Faba pichurim. Faba pechuris.* An oblong oval, brown, and ponderous seed, supposed to be the produce of a *Laurus,* brought from the Brazils. Their smell is like that of musk, between it and the scent of sassafras. They are exhibited as carminatives in flatulent colics, diarrhœas, and dysenteries.

FA´BA PURGA´TRIX. See *Ricinus.*

FA´BA SA´NCTI IGNA´TII. See *Ignatia amara.*

FA´BA SUI´LLA. See *Hyoscyamus.*

FABA´RIA. (From *faba,* a bean, which it resembles.) Orphine. See *Sedum telephium.*

FABRICIUS, HIERONYMUS, born at *Aquapendente* in Italy, 1537. He studied at Padua under Fallopius, whom he succeeded as professor of anatomy and surgery there; which office he held for nearly half a century with great credit, and died at the advanced age of eighty-two universally regretted. The republic of Venice also conferred many honours upon him. He is thought to have been the first to notice the valves of the veins, which he demonstrated in 1574. But his surgical works obtained him most reputation; indeed he has been called the Father of modern surgery. His first publication in 1592 contained five Dissertations on Tumours, Wounds, Ulcers, Fractures, and Dislocations. He afterwards added another part, treating of all the Diseases, which are curable by manual Operation. This work passed through seventeen editions in different languages.

FABRICIUS, James, was born at Rostock in 1577. After travelling through different parts of Europe, he graduated at Jena, and soon gained extensive practice. He was professor of medicine and the mathematics at Rostock during forty years, and first physician to the Duke of Mecklenburgh; afterwards went to Copenhagen, and was made physician to the Kings of Norway and Denmark, and died there in 1652. He has left several Tracts on Medical Subjects.

FABRICIUS, Philip, Conrad, professor of medicine at Helmstadt, was author of several useful works in anatomy and surgery. His first treatise, "Idea Anatomes Practicæ," 1741, contained some new directions in the Art of Injection, and described several branches of the Portio Dura, &c. In another work he has some good observations on the Abuse of Trepanning.

FABRICIUS, William, better known by the name of *Hildanus*, from Hilden, in Switzerland, where he was born in 1560. He repaired to Lausanne, to complete his knowledge of surgery, at the age of twenty-six; and distinguished himself there by his assiduity, and the successful treatment of many difficult cases. He studied medicine also, and went to practise both arts at Payenne in 1605; but ten years after was invited to Berne by the senate, who granted him a pension. In the latter part of his life, severe illness prevented his professional exertions, which had procured him general esteem, and high reputation. His death occurred in 1634. His works were written in German, but have been mostly translated into Latin. He published five "Centuries of Observations," which present many curious facts, as also several instruments invented by him.

FACE. The lower and anterior part of the cranium, or skull.

FA'CIAL. Belonging to the face; as facial nerve, &c.

FA'CIAL NERVE. *Nervus facialis. Portio dura* of the auditory nerve. These nerves are two in number, and are properly the eighth pair: but are commonly called the seventh, being reckoned with the auditory, which is the portio mollis of the seventh pair. They arise from the fourth ventricle of the brain, pass through the petrous portion of the temporal bone to the face, where they form the pes anserinus, which supplies the integuments of the face and forehead.

FA'CIES HIPPOCRA'TICA. That particular disposition of the features which immediately precedes the stroke of death is so called, because it has been so admirably described by Hippocrates.

Fa'cies ru'bra. See *Gutta rosacea.*

FACTI'TIOUS. A term applied to any thing which is made by art, in opposition to that which is native, or found already made in nature.

FA'CULTY. *Facultas.* The power or ability by which any action is performed.

FÆ'CES. The plural of *fæx.* The alvine excretions.

FÆ'CULA. (Diminutive of *fæx.*) A substance obtained by bruising or grinding certain vegetables in water. It is that part which, after a little, falls to the bottom. The fæcula of plants differs principally from gum or mucus in being insoluble in cold water, in which it falls with wonderful quickness. There are few plants which do not contain fæcula; but the seeds of gramineous and leguminous vegetables, and all tuberose roots contain it most plentifully.

FÆX. The alvine excretions are called *fæces.*

FAGA'RA. (From *fagus*, the beech, which it resembles.) The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.*

Faga'ra ma'jor. See *Fagara plerota.*

Faga'ra octa'ndra. The systematic name of the plant which affords *Tacamahaca*, which is a resinous substance that exudes both spontaneously, and when incisions are made into the stem of this tree: *Fagara foliolis tomentosis*, of Linnæus, and not as was formerly supposed from the *Populus balsamifera Linnæi.* Two kinds of a tacamahaca are met with in the shops. The best, called, from its being collected in a kind of gourd shell, tacamahaca in shells, is somewhat unctuous and soft, of a pale yellowish or greenish colour, a bitterish aromatic taste, and a fragrant delightful smell, approaching to that of lavender and ambergris. The more common sort is in semi-transparent grains, of a whitish, yellowish, brownish, or greenish colour, and of a less grateful smell than the former. Tacamahaca was formerly in high estimation as an ingredient in warm stimulating plasters; and although seldom used internally, it may be given with advantage as a corroborant and astringent balsamic.

Faga'ra plero'ta. *Fagara major. Castana Luzonis. Cubebis. Fagara plerota* of Linnæus. A plant found in the Philippine islands. The berries are aromatic, and, according to Avicenna, heating, drying, good for cold, weak stomachs, and astringent to the bowels.

Fagopy'rum. (From φαγος, the beech, and πυρος, wheat; because its seeds were supposed to resemble the mast, *i. e.* fruit of beech.) See *Polygonum fagopyrum.*

Fagotri'ticum. See *Polygonum fagopyrum.*

FA'GUS. (From φαγω, to eat; its nut being one of the first fruits used by man.)

1. The name of a genus of plants in the

Linnæan system. Class, *Monœcia.* Order, *Polyandria.*

2. The pharmacopœial name of the beech. See *Fagus sylvatica.*

Fa'gus casta'nea. The systematic name of the chesnut-tree. *Castanea. Lopima. Mota. Glans Jovis Theophrasti.* Jupiter's acorn, and Sardinian acorn. The common chesnut. The fruit of this plant, *Fagus castanea: foliis lanceolatis, acuminato-serratis, subtus nudis,* of Linnæus, are much esteemed as an article of luxury, after dinner. Toasting renders them more easy of digestion; but, notwithstanding, they must be considered as improper for weak stomachs. They are moderately nourishing, as containing sugar, and much farinaceous substance.

Fa'gus sylva'tica. The systematic name of the beech tree. *Fagus.* Also called *Oxya, Balanda, Valanida.* The beech-tree. The fruit and interior bark of this tree, *Fagus sylvatica; foliis ovatis, obsolete serratis,* of Linnæus, are occasionally used medicinally, the former in obstinate head-ache, and the latter in the cure of hectic fever. The oil expressed from beech-nuts is supposed to destroy worms; a child may take two drachms of it night and morning; an adult, an ounce. The poor people in Silesia use this oil instead of butter.

Fainting. See *Syncope.*

Fairburn water. A sulphureous water in the county of Ross, in the north of England.

FA'LCIFORM PRO'CESS. (*Falciformis;* from *falx,* a scythe, and *forma,* resemblance.) The falx. A process of the dura mater, that arises from the cristi galli, separates the hemispheres of the brain, and terminates in the tentorium.

Falde'lla. Contorted lint, used for compresses.

Falling sickness. See *Epilepsia.*

Fallopian tube. See *Tuba Fallopiana.*

Fallopian ligament. See *Poupart's ligament.*

FALLOPIUS, Gabriel, a physician of Modena, was born about the year 1523. He showed early great zeal, in anatomy, botany, chemistry, and other branches of knowledge; and after studying in Italy, travelled to other countries for his improvement. In 1548, he was appointed professor of anatomy at Pisa, and three years after at Padua; where he also taught botany, but with less celebrity. His death happened in 1563. He distinguished himself, not only as an anatomist, but also in medicine and surgery. Douglas has characterized him, as highly systematic in teaching, successful in treating diseases, and expeditious in operating. Some of the discoveries, to which he laid claim, appear to have been anticipated; as for instance, the tubes, proceeding from the uterus, though generally called after him *Fallopian.* However, he has the merit of recovering many of the observtions of the antients, which had fallen into oblivion. His "Observationes Anatomicæ," published in 1561, was one of the best works of the 16th century; in this some of the errors, which had escaped his master, Vesalius, are modestly pointed out. Many other publications, ascribed to him, were printed after his death; some of which are evidently spurious.

FALX. See *Falciform process.*

Fa'mes cani'na. See *Bulimia.*

Famigerati'ssimum empla'strum. (From *famigeratus,* renowned; from *fama,* fame, and *gero,* to bear; so named from its excellence.) A plaster used in intermittent fevers, made of aromatic, irritating substances, and applied to the wrists.

FA'RFARA. (From *farfarus,* the white poplar; so called because its leaves resemble those of the white poplar.) See *Tussilago.*

FARI'NA. (From *far,* corn, of which it is made.) Meal, or flour. A term given to the pulverulent and glutinous part of wheat, and other seeds, which is obtained by grinding and sifting. It is highly nutritious, and consists of gluten, starch, and mucilage. See *Triticum.*

FARINA'CEA. (From *farina,* flour.) This term includes all those substances, employed as aliment, called cerealia, legumina, and nuces oleosæ.

FARINA'CEOUS. A term given to all articles of food which contain *farina.* See *Farina.*

Farina'rium. See *Alica.*

Fa'rreus. (From *far,* corn.) Scurfy. An epithet of urine, where it deposits a branny sediment.

FA'SCIA. (From *fascis,* a bundle; because, by means of a band, materials are collected into a bundle.) *Ligatio. Ligatura. Alligatura.* A bandage, fillet, or roller.

2. The aponeurotic expansions of muscles, which bind parts together, are termed *fasciæ.*

FA'SCIA LA'TA. A thick and strong tendinous expansion, sent off from the back, and from the tendons of the glutei and adjacent muscles, to surround the muscles of the thigh. It is the thickest on the outside of the thigh and leg, but towards the inside of both becomes gradually thinner. A little below the trochanter major, it is firmly fixed to the linea aspera; and, farther down, to that part of the head of the tibia that is next the fibula, where it sends off the tendinous expansion along the outside of the leg. It serves to strengthen the action of the muscles, by keeping them firm in their proper places when in action, particularly the tendons that pass over the joints where this membrane is thickest.

Fascia'lis. (*Fascialis,* sc. *musculus.*) See *Tensor vaginæ femoris.*

Fascia′tio. (From *fascia*, a fillet.) The binding up any diseased or wounded part with bandages.

FASCI′CULUS. (From *fascis*, a bundle.) A handful.

FAT. *Adeps.* A concrete oily matter contained in the cellular membrane of animals, of a white, or yellowish colour, with little or no smell, nor taste. It differs in different animals in solidity, colour, taste, &c. and likewise in the same animal at different ages. In infancy it is white, insipid, and not very solid; in the adult it is firm and yellowish, and in animals of an advanced age, its colour is deeper, its consistence various, and its taste in general stronger. Fat meat is nourishing to those that have strong digestive powers. It is used externally, as a softening remedy, and enters into the composition of ointments and plasters.

Fatu′itas. (From *futuus*, silly.) Foolishness. A synonym of *Amentia*.

FAU′CES. (*Faux*, pl. *fauces.*) *Isthmion. Amphibranchia.* A cavity behind the tongue, palatine arch, uvula, and tonsils: from which the pharynx and larynx proceed.

Fau′fel. Terra japonica, or catechu.

Fava′go austra′lis. (From *favus*, a honey-comb, from its resemblance to a honey-comb.) A species of bastard sponge.

Fa′vus. A honey-comb. A species of achor, or foul ulcer.

FE′BRES. An order in the class *pyrexiæ* of Cullen, characterized by the presence of pyrexia, without primary local affection.

FEBRI′CULA. (Dim. of *febris*, a fever.) A term employed to express a slight degree of symptomatic fever.

Febri′fuga. (From *febrem fugare*, to drive away a fever.) The plant fever-few; lesser centaury.

FE′BRIFUGE. (*Febrifuga*, from *febris*, a fever, and *fugo*, to drive away.) A medicine that possesses the property of abating the violence of any fever.

Febri′fugum cræ′nii. Regulus of antimony.

Febri′fugum o′leum. Febrifuge oil. The flowers of antimony, made with sal-ammoniac and antimony sublimed together, and exposed to the air, when they deliquesce.

Febri′fugus pul′vis. Febrifuge powder. The Germans give this name to the pulvis stypticus Helvetii. In England, a mixture of oculi cancrorum and emetic tartar, in the proportion of half a drachm and two grains, has obtained the same name; in fevers it is given in doses of gr. iii. to iv.

Febri′fugus sal. Regenerated marine salt.

Febri′fugus spi′ritus domini Clut′ton. Mr. Clutton's febrifuge spirit. An imperfect ether, which is sometimes given diluted in water, as a common drink in fevers.

FE′BRIS. (*Febris, -is*, f. from *ferveo*, to burn.) A fever. A disease characterized by an increase of heat, an accelerated pulse, a foul tongue and an impaired state of several functions of the body.

Fe′bris a′lba. See *Chlorosis*.

Fe′bris amphimeri′na. A quotidian, or remittent fever.

Fe′bris angino′sa. The scarlatina anginosa.

Fe′bris aphtho′sa. An aphthous fever.

Fe′bris a′rdens. A burning inflammatory fever.

Fe′bris asso′des. A tertian fever, with extreme restlessness.

Fe′bris autumna′lis. An autumnal or bilious fever.

Fe′bris bullo′sa. The pemphigus, or vesicular fever.

Fe′bris cacato′ria. An intermittent, with diarrhœa.

Fe′bris ca′rcerum. The prison fever.

Fe′bris catarrha′lis. The catarrhal fever.

Fe′bris chole′rica. A fever with bilious diarrhœa.

FE′BRIS CONTI′NUA. A continued fever. A division of the order *febres*, in the class *pyrexiæ* of Cullen. Continued fevers have no intermission, but exacerbations come on usually twice in one day. The genera of continued fever are: 1. *Synocha*, or inflammatory fever, known by increased heat; pulse frequent, strong, and hard; urine high coloured; senses not much impaired. See *Synocha*. 2. *Typhus*, or putrid-tending fever, which is contagious, and is characterized by moderate heat; quick, weak, and small pulse; senses much impaired, and great prostration of strength. This genus has two species; *Typhus petechialis*, attended with petechiæ; and *Typhus icterodes*, or yellow fever; and of the former there are two varieties; *Typhus mitior*, or nervous fever; and *Typhus gravior*, or putrid fever. See *Febris nervosa*, and *Typhus*. 3. *Synochus*, or mixed fever. See *Synochus*.

Fe′bris elo′des. A fever with continual and profuse sweating.

Fe′bris epi′ala. A fever with a continual sense of cold.

Fe′bris erysipelato′sa. See *Erysipelas*.

Fe′bris exanthema′tica. Fever with eruption.

Fe′bris fla′va. The yellow fever.

FE′BRIS HE′CTICA. A genus of disease in the class *pyrexiæ*, and order *febris* of Cullen. It is known by exacerbations at noon, but greater in the evening, with slight remissions in the morning, after nocturnal sweats; the urine depositing a furfuraceo-lateritious sediment; appetite good; thirst moderate. Hectic fever is symptomatic of chlorosis, scrophula, phthisis, diseased viscera, &c.

Fe′bris hunga′rica. A species of tertian fever.

Fe'bris hydro'des. A fever with profuse sweats.

Fe'bris inflammato'ria. See *Synocha.*

Fe'bris castre'nsis. A camp fever, generally typhus.

FE'BRIS INTERMI'TTENS. An intermittent fever, or ague. A division of the order *febres* of Cullen, in the class *pyrexiæ.* Intermittent fevers are known by cold, hot, and sweating stages, in succession, attending each paroxysm, and followed by an intermission or remission. There are three genera of intermitting fevers and several varieties.

1. *Intermittens quotidiana.* A quotidian ague. The paroxysms return in the morning, at an interval of about twenty-four hours.

2. *Intermittens tertiana.* A tertian ague. The paroxysms commonly come on at midday, at an interval of about forty-eight hours.

3. *Intermittens quartana.* A quartan ague. The paroxysms come on in the afternoon, with an interval of about seventy-two hours. The tertian ague is most apt to prevail in the spring, and the quartan in autumn.

Of the quotidian, tertian, and quartan intermittents, there are several varieties and forms; as the double tertian, having a paroxysm every day, with the alternate paroxysms, similar to one another. The double tertian, with two paroxysms every other day. The triple tertian, with two paroxysms on one day, and another on the next. The double quartan, with two paroxysms on the first day, none on the second and third, and two again on the fourth day. The double quartan, with a paroxysm on the first day, another on the second, but none on the third. The triple quartan, with three paroxysms every fourth day. The triple quartan, with a paroxysm every day, every fourth paroxysm being similar.

When these fevers arise in the spring of the year, they are called vernal; and when in the autumn, they are known by the name of autumnal. Intermittents often prove obstinate, and are of long duration, in warm climates; and they not unfrequently resist every mode of cure, so as to become very distressing to the patient: and by the extreme debility which they are thereby induce, often give rise to other chronic complaints.

It seems to be pretty generally acknowledged, that marsh miasmata, or the effluvia, arising from stagnant water, or marshy ground, when acted upon by heat, are the most frequent exciting cause of this fever. In marshes, the putrefaction of both vegetable and animal matter is always going forward, it is to be presumed; and hence it has been generally conjectured, that vegetable and animal putrefaction imparted a peculiar quality to the effluvia arising from thence. We are not yet acquainted with all the circumstances, which are requisite to render marsh miasma productive of the intermittents; but it may be presumed that a moist atmosphere has a considerable influence in promoting its action. A watery poor diet, great fatigue, long watching, grief, much anxiety, exposure to cold, lying in damp rooms or beds, wearing damp linen, the suppression of some long-accustomed evacuation, or the recession of eruptions, have been ranked among the exciting causes of intermittents; but it is more reasonable to suppose that these circumstances act only by inducing that state of the body, which predisposes to these complaints. By some, it has been imagined that an intermittent fever may be communicated by contagion; but this supposition is by no means consistent with general observation.

One peculiarity of this fever is, its great susceptibility of a renewal from very slight causes, as from the prevalence of an easterly wind, even without the repetition of the original exciting cause. It would appear that a predisposition is left in the habit, which favours the recurrence of the complaint. In this circumstance, intermittents differ from most other fevers, as it is well known, that after a continued fever has once occurred, and been removed, the person so affected is by no means so liable to a fresh attack of the disorder, as one in whom it had never taken place.

We have not yet attained a certain knowledge of the proximate cause of an intermittent fever, but a deranged state of the stomach and primæ viæ is that which is most generally ascribed.

Each paroxysm of an intermittent fever is divided into three different stages, which are called the *cold*, the *hot*, and the *sweating stages* or *fits.*

The *cold* stage commences with languor, a sense of debility and sluggishness in motion, frequent yawning and stretching, and an aversion to food. The face and extremities become pale, the features shrink, the bulk of every external part is diminished, and the skin over the whole body appears constricted, as if cold had been applied to it. At length the patient feels very cold, and universal rigors come on with pains in the head, back, loins, and joints, nausea and vomiting of bilious matter; the respiration is small, frequent and anxious; the urine is almost colourless; sensibility is greatly impaired; the thoughts are somewhat confused; and the pulse is small, frequent and often irregular. In a few instances, drowsiness and stupor have prevailed in so high a degree as to resemble coma or apoplexy; but this is by no means usual.

These symptoms abating after a short time, the second stage commences with an increase of heat over the whole body, redness of the face, dryness of the skin, thirst, pain in the head, throbbing in the temples, anxiety and restlessness; the respiration is fuller and more free, but still frequent; the tongue is furred, and the pulse has become regular, hard and full. If the attack has been very severe, then perhaps delirium will arise.

When these symptoms have continued for some time, a moisture breaks out on the forehead, and by degrees becomes a sweat, and this, at length, extends over the whole body. As this sweat continues to flow, the heat of the body abates, the thirst ceases, and most of the functions are restored to their ordinary state. This constitutes the third stage.

It must, however, be observed, that in different cases these phenomena may prevail in different degrees, and their mode of succession vary; that the series of them may be more or less complete; and that the several stages, in the time they occupy, may be in different proportions to one another.

Such a depression of strength has been known to take place on the attack of an intermittent, as to cut off the patient at once; but an occurrence of this kind is very uncommon.

Patients are seldom destroyed in intermittents from general inflammation, or from a fulness of the vessels either of the brain or of the thoracic viscera, as happens sometimes in a continued fever; but when they continue for any length of time, they are apt to induce other complaints, such as a loss of appetite, flatulency, scirrhus of the liver, dropsical swellings, and general debility, which in the end now and then prove fatal. In warm climates, particularly, intermittents are very apt to terminate in this manner, if not speedily removed; and in some cases, they degenerate into continued fevers. When the paroxysms are of short duration, and leave the intervals quite free, we may expect a speedy recovery; but when they are long, violent, and attended with much anxiety and delirium, the event may be doubtful. Relapses are very common to this fever at the distance of five or six months, or even a year; autumnal intermittents are more difficult to remove than vernal ones, and quartans more so than the other types

Dissections of those who have died of an interment, show a morbid state of many of the viscera of the thorax and abdomen; but the liver, and organs concerned in the formation of bile, as likewise the mesentery, are those which are usually most affected.

The treatment of an intermittent fever resolves itself into those means, which may be employed during a paroxysm, to arrest its progress, or to mitigate its violence; and those, which may prevent any return, and effect a permanent cure: this forms of course the more important part of the plan; but it is sometimes necessary to palliate urgent symptoms; and it is always desirable to suspend a paroxysm, if possible, not only to prevent mischief, but also that there may be more time for the use of the most effectual remedies. When therefore a fit is commencing, or shortly expected, we may try to obviate it by some of those means, which excite movements of an opposite description in the system: an emetic will generally answer the purpose, determining the blood powerfully to the surface of the body; or a full dose of opium, assisted by the pediluvium, &c.; ether also, and various stimulant remedies will often succeed, but these may perhaps aggravate, should they not prevent the fit; the cold bath, violent exercise, strong impressions on the mind, &c. have likewise been occasionally employed with effect. Should the paroxysm have already come on, and the cold stage be very severe, the warm bath, and cordial diaphoretics in repeated moderate doses may assist in bringing warmth to the surface: when on the contrary great heat prevails, the antiphlogistic plan is to be pursued; and it may be sometimes advisable, when an organ of importance is much pressed upon, to take some blood locally, or even from the general system, if the patient is plethoric and robust: and where profuse perspirations occur, acidulated drink may be exhibited, with a little wine to support the strength, keeping the surface cool at the same time. In the intermissions, in conjunction with a generous diet, moderate exercise, and other means calculated to improve the vigour of the system, tonics are the remedies especially relied upon. At the head of these we must certainly place the cinchona, which taken largely in substance, will seldom fail to cure the disease, where it is not complicated with visceral affection: in a quotidian an ounce at least should be given between the fits, in a tertian half as much more, and in a quartan two ounces. It will be generally better to clear out the primæ viæ before this remedy is begun with; and various additions may often be required, to make it agree better with the stomach and bowels, particularly aromatics and other stimulants, aperients or small doses of opium, according to circumstances. We must not be content with the omission of a single paroxysm, but continue it till the health appears fully established. In failure of the cinchona other vegetable tonics may be tried, as the salix, gentian, calumba, and other bitters; or the astringents, as tormentil, galls, &c.; or these variously combined with each other, or with aromatics. The mineral acids are often powerfully tonic, and the sulphuric has been of late stated to have proved very successful in the removal of this disease. Some metallic preparations are also highly efficacious, particularly the liquor arsenicalis, which however is too hazardous a remedy to be employed indiscriminately; it must be given in small doses two or three times a day, and its effects assiduously watched. The sulphate of zinc, and chalybeates may be used more freely alone, or preferably joined with bitters. Where visceral disease attends, we can hardly succeed in curing the ague, till this be removed: a state of congestion, or inflammatory tendency, may require local bleeding, blistering, purging, &c.; and when there is a more fixed obstruction, particularly in the liver, the cautious use of mercury will be most likely to avail.

Fe′bris la′ctea. Milk fever.

Fe′bris le′nta. A slow fever.

Fe′bris lenticula′ris. A species of petechial fever.

Fe′bris mali′gna. The malignant fever.

Fe′bris milia′ris. The miliary fever.

Fe′bris morbillo′sa. The measles.

FE′BRIS NERVO′SA. *Febris lenta nervosa.* The nervous fever. A variety of typhus, the *typhus mitior* of Cullen, but by many considered as a distinct disease. It mostly begins with loss of appetite, increased heat and vertigo; to which succeed nausea, vomiting, great langour, and pain in the head, which is variously described, by some like cold water pouring over the top, by others a sense of weight. The pulse, before little increased, now becomes quick, febrile, and tremulous; the tongue is covered with a white crust, and there is great anxiety about the præcordia. Towards the seventh or eighth day, the vertigo is increased, and tinnitus aurium, cophosis, delirium, and a dry and tremulous tongue, take place. The disease mostly terminates about the fourteenth or twentieth day. See *Typhus.*

Fe′bris nosocomio′rum. The fever of hospitals.

Fe′bris palu′stris. The marsh fever.

Fe′bris pe′stilens. The plague.

Fe′bris petechia′lis. Fever with purple spots.

Fe′bris pu′trida. See *Typhus.*

Fe′bris scarlati′na. Scarlet fever.

Fe′bris sudato′ria. Sweating fever.

Fe′bris sy′nocha. See *Synocha.*

Fe′bris typho′des. See *Typhus.*

Fe′bris variolo′sa. A variolous or small-pox fever.

Fe′bris urtica′ria. Fever with nettle-rash.

Fe′bris vesiculo′sa. See *Erysipelas.*

Fe′cula. See *Fæcula.*

Fel. See *Bile.*

Fel natu′ræ. See *Aloe.*

Fel-wort. So called from its bitter taste like bile. See *Gentiana.*

Felli′culus. The gall bladder.

Felli′flua pa′ssio. A name given to cholera.

Felon. See *Paronychia.*

Fe′men. (*Quasi ferimen,* from *fero,* to bear; so called because it is the chief support of the body.) The thigh.

Femora′lis arte′ria. A continuation of the external iliac along the thigh, from Poupart's ligament to the ham.

Fe′moris os. See *Femur.*

FE′MUR. (*Femur,-moris,* n.) *Os femoris.* The thigh-bone. A long cylindrical bone, situated between the pelvis and tibia. Its upper extremity affords three considerable processes; these are, the head, the trochanter major, and trochanter minor. The head, which forms about two-thirds of a sphere, is turned inwards, and is received into the acetabulum of the os innominatum, with which it is articulated by enarthrosis. It is covered by a cartilage, which is thick in its middle part, and thin at its edges, but which is wanting in its lower internal part, where a round spongy fossa is observable, to which the strong ligament, usually, though improperly called the *round* one, is attached. This ligament is about an inch in length, flattish, and of a triangular shape, having its narrow extremity attached to the fossa just described, while its broader end is fixed obliquely to the rough surface near the inner and anterior edge of the acetabulum of the os innominatum, so that it appears shorter internally and anteriorly than it does externally and posteriorly.

The head of the os femoris is supported obliquely, with respect to the rest of the bone, by a smaller part, called the *cervix,* or *neck,* which, in the generality of subjects, is about an inch in length. At its basis we observe two oblique ridges, which extend from the trochanter major to the trochanter minor. Of these ridges, the posterior one is the most prominent. Around this neck is attached the capsular ligament of the joint, which likewise adheres to the edge of the cotyloid cavity, and is strengthened anteriorly by many strong ligamentous fibres, which begin from the lower and anterior part of the ilium, and spreading broader as they descend, adhere to the capsular ligament, and are attached to the anterior oblique ridge at the bottom of the neck of the femur. Posteriorly and externally, from the basis of the neck of the bone, a large unequal protuberance stands out, which is the *trochanter major.* The upper edge of this process is sharp and pointed posteriorly, but is more obtuse anteriorly. A part of it is rough and unequal, for the insertion of the muscles; the rest is smooth, and covered with a thin cartilaginous crust, between which and the tendon of the glutæus maximus that slides over it, a large bursa mucosa is interposed. Anteriorly, at the root of this process, and immediately below the bottom of the neck, is a small process called *trochanter minor.* Its basis is nearly triangular, having its two upper angles turned towards the head of the femur and the great trochanter, while its lower angle is placed towards the body of the bone. Its summit is rough and rounded. These two processes have gotten the name of *trochanters,* from the muscles that are inserted into them being the principal instruments of the rotatory motion of the thigh. Immediately below these two processes the body of the bone may be said to begin. It is smooth and convex before, but is made hollow behind by the action of the muscles. In the middle of this posterior concave surface is observed a rough ridge, called *linea aspera,* which seems to originate from the trochanters, and extending downwards, divides at length into two branches, which terminate in the tuberosities near the condyles. At the upper part of it, blood-vessels pass to the internal substance of the bone, by a hole that runs obliquely upwards.

The lower extremity of the os femoris is larger than the upper one, and somewhat flattened, so as to form two surfaces, of which the anterior one is broad and convex, and the posterior one narrower and slightly concave. This end of the bone terminates in two large protuberances, called *condyles,* which are united before so as to form a pulley, but are separated behind by a considerable cavity, in which the crural vessels and nerves are placed secure from the compression to which they would otherwise be exposed in the action of bending the leg. Of these two condyles, the external one is the largest; and when the bone is separated from the rest of the skeleton, and placed perpendicularly, the internal condyle projects less forwards, and descends nearly three-tenths of an inch lower than the external one; but in its natural situation, the bone is placed obliquely, so that both condyles are then nearly on a level with each other. At the side of each condyle, externally, there is a tuberosity, the situation of which is similar to that of the condyles of the os humeri. The two branches of the linea aspera terminate in these tuberosities, which are rough, and serve for attachment of ligaments and muscles.

Fénnel. See *Anethum fœniculum.*

Fénnel, hog's. See *Peucedanum.*

FENE'STRA OVA'LIS. An oblong or elliptical foramen, between the cavity of the tympanum and the vestibulum of the ear. It is shut by the stapes.

FENE'STRA ROTU'NDA. A round foramen, leading from the tympanum to the cochlea of the ear. It is covered by a membrane in the fresh subject.

Fénugreek. See *Trigonella fœnum græcum.*

FE'RINE. (*Ferinus,* sc. *morbus,* savage or brutal.) A term occasionally applied to any malignant or noxious disease.

FERMENTA'TION. *Fermentatio.* A spontaneous commotion in a vegetable substance, by which its properties are totally changed. There are several circumstances required in order that fermentation may proceed: such are, 1. A certain degree of fluidity: thus, dry substances do not ferment at all. 2. A certain degree of heat. 3. The contact of air. Chemists, after Boerhaave, have distinguished three kinds of fermentation: the *spirituous,* which affords ardent spirit; the *acetous,* which affords vinegar, or acetic acid; and the *putrid* fermentation, or putrefaction, which produces volatile alkali. The conditions necessary for spirituous fermentation are, 1. A saccharine mucilage. 2. A degree of fluidity slightly viscid. 3. A degree of heat between 55 and 65 of Fahrenheit. 4. A large mass, in which a rapid commotion may be excited. When these four conditions are united, the spirituous fermentation takes place, and is known by the following characteristic phenomena: 1. An intestine motion takes place. 2. The bulk of the mixture then becomes augmented. 3. The transparency of the fluid is diminished by opake filaments. 4. Heat is generated. 5. The solid parts mixed with the liquor rise and float in consequence of the disengagement of elastic fluid. 6. A large quantity of carbonic acid gas is disengaged in bubbles. All these phenomena gradually cease in proportion as the liquor loses its sweet and mild taste, and it becomes brisk, penetrating, and capable of producing intoxication. In this manner wine, beer, cider, &c. are made. All bodies which have undergone the spirituous fermentation are capable of passing on to the acid fermentation; but although it is probable that the acid fermentation never takes place before the body has gone through the spirituous fermentation, yet the duration of the first is frequently so short and imperceptible, that it cannot be ascertained. Besides the bodies which are proper for spirituous fermentation, this class includes all sorts of fæcula boiled in water. The conditions required for the acid fermentation are, 1. A heat from 70 to 85 degrees of Fahrenheit. 2. A certain degree of liquidity. 3. The presence of atmospheric air. 4. A moderate quantity of fermentable matter. The phenomena which accompany this fermentation, are an intestine motion, and a considerable absorption of air. The transparent liquor becomes turbid, but regains its limpidity when fermentation is over. The fermented liquor now consists, in a great measure, of a peculiar acid, called the acetic acid, or vinegar. Not a vestige of spirit remains, it being entirely decomposed; but the greater the quantity of spirit in the liquor, previous to the fermentation, the greater will be the quantity of true vinegar obtained. See also *Putrefaction.*

FERME'NTUM. (*Quasi fervimentum,* from *ferveo,* to work.) Yest.

Fern, male. See *Polypodium filix mas.*

Fern, female. See *Pteris aquilina.*

FERNEL, JOHN, was born at Claremont, near the end of the 15th century. He went at the age of 19 to prosecute his studies at Paris, and distinguished himself so much, that, after taking the degree of master of arts, he was chosen professor of dialectics in his college. His application then became intense, till a quartan ague obliged him to seek his native air: and on his return to Paris, he determined on the medical profession, and taught philosophy for his support, till in 1530, he took his doctor's degree. Soon after he married, and speedily got into extensive practice; and at length was made physician to the Dauphin, who afterwards became Henry II. He was obliged to accompany that monarch in his campaigns, yet he still, though at the age of sixty, seldom passed a day without writing. But in 1558, having lost his wife of a fever, he did not long survive her. His works are numerous on philosophical, as well as medical subjects: of the latter the most esteemed were his "Medicina," dedicated to Henry II., and a posthumous treatise on fevers.

Ferrame'ntum. An instrument made of iron.

Fe'rri alkali'ni li'quor. Solution of alkaline iron. "Take of iron, two drachms and a half; nitric acid, two fluid-ounces: distilled water, six fluid-ounces; solution of subcarbonate of potash, six fluid-ounces. Having mixed the acid and water, pour them upon the iron, and when the effervescence has ceased, pour off the clear acid solution; add this gradually, and at intervals, to the solution of subcarbonate of potash, occasionally shaking it, until it has assumed a deep brown-red colour, and no further effervescence takes place. Lastly, set it by for six hours, and pour off the clear solution." This preparation was first described by Stahl, and called tinctura martis alkalina, and is now introduced in the Lond. Pharm. as affording a combination of iron distinct from any other, and often applicable to practice. The dose is from half a drachm to a drachm.

Fe'rri carbo'nas. See *Ferri subcarbonas.*

Fe'rri limatu'ra purifica'ta. Purified iron filings. These possess tonic, astringent, and deobstruent virtues, and are calculated to relieve chlorosis and other diseases in which steel is indicated, where acidity in the primæ viæ abounds.

Fe'rri rubi'go. See *Ferri subcarbonas.*

Fe'rri subcarbo'nas. *Ferri carbonas. Ferrum præcipitatum,* formerly called *chalybis rubigo præparata* and *ferri rubigo.* Subcarbonate of iron. "Take of sulphate of iron, eight ounces; subcarbonate of soda, six ounces; boiling water, a gallon. Dissolve the sulphate of iron and subcarbonate of soda separately, each in four pints of water; then mix the solutions together and set it by, that the precipitated powder may subside; then having poured off the supernatant liquor, wash the subcarbonate of iron with hot water, and dry it upon bibulous paper in a gentle heat." It possesses mild corroborant and stimulating properties, and is exhibited with success in leucorrhæa, ataxia, asthenia, chlorosis, dyspepsia, rachitis, &c. Dose from two to ten grains.

Fe'rri su'lphas. Sulphate of iron; formerly called *sal martis, vitriolum martis, vitriolum ferri,* and lately *ferrum vitriolatum.* Green vitriol. "Take of iron, sulphuric acid, of each by weight, eight ounces; water, four pints. Mix together the sulphuric acid and water in a glass vessel, and add thereto the iron; then after the effervescence has ceased, filter the solution through paper, and evaporate it until crystals form as it cools. Having poured away the water, dry these upon bibulous paper." This is an excellent preparation of iron, and is exhibited, in many diseases, as a styptic, tonic, astringent, and anthelmintic. Dose from one grain to five grains.

FE'RRUM. (*Ferrum, -i,* neut. the etymology uncertain.) See *Iron.*

Fe'rrum ammonia'tum. Ammoniated iron; formerly known by the names of *flores martiales; flores salis ammoniaci martiales; ens martis; ens veneris Boylei; sal martis muriaticum sublimatum,* and lately by the title of *ferrum ammoniacale.* "Take of subcarbonate of iron, muriate of ammonia, of each a pound. Mix them intimately, and sublime by immediate exposure to a strong fire; lastly, reduce the sublimed ammoniated iron to powder." This preparation is astringent and deobstruent, in doses from 3 to 15 grs. or more in the form of bolus or pills, prepared with some gum. It is exhibited in most cases of debility, in chlorosis, asthenia, menorrhagia, intermittent fevers, &c. This or some other strong preparation of iron, as the Tinct. ferri muriatis, Mr. Cline is wont to recommend in scirrhous affections of the breast. See *Tinctura ferri ammoniati.*

Fe'rrum tartariza'tum. Tartarized iron. A tartrate of potash and iron; formerly called *tartarus chalybeatus; mars solubilis; ferrum potabile.* "Take of iron, a pound; supertartrate of potash, powdered, two pounds; water, a pint. Rub them together; and expose them to the air in a broad glass vessel for eight days, then dry the residue in a sand bath, and reduce it to a very fine powder. Add to this powder a pint more water, and expose it for eight days longer, then dry it, and reduce it to a very fine powder." Its virtues are astringent and tonic, and it forms in solution an excellent tonic fomentation to contusions, lacerations, distortions, &c. Dose from ten grains to half a drachm.

Fe'rsæ. The measles.

FE'RULA. The name of a genus of plants in the Linnæan system. Class *Pentandria.* Order, *Digynia.*

Fe'rula Africa'na galbani'fera. The galbanum plant.

Fe'rula assafœ'tida. The systematic name of the assafœtida plant. *Assafœtida.*

Hingiseh of the Persians. *Altiht* of the Arabians. By some thought to be the *σιλφιον*, vel, *οπος σιλφιου* of Dioscorides, Theophrastus, and Hippocrates. *Laser et laserpitium* of the Latins. Assafœtida gum resin. The plant which affords this gum resin, is the *Ferula assafœtida foliis alternatim sinuatis, obtusis,* of Linnæus. It grows plentifully on the mountains in the provinces of Chorassan and Laar, in Persia.

The process of obtaining it is as follows: the earth is cleared away from the top of the roots of the oldest plants; the leaves and stalks are then twisted away, and made into a covering, to screen the root from the sun; in this state the root is left for forty days, when the covering is removed, and the top of the root cut off transversely; it is then screened again from the sun for forty-eight hours, when the juice it exudes is scraped off, and exposed to the sun to harden. A second transverse section of the root is made, and the exudation suffered to continue for forty-eight hours, and then scraped off. In this manner it is eight times repeatedly collected in a period of six weeks. The juice thus obtained has a bitter, acrid, pungent taste, and is well known by its peculiar nauseous smell, the strength of which is the surest test of its goodness. This odour is extremely volatile, and of course the drug loses much of its efficacy by keeping. It is brought to us in large irregular masses, composed of various little shining lumps, or grains, which are partly of a whitish colour, partly reddish, and partly of a violet hue. Those masses are accounted the best which are clear, of a pale reddish colour, and variegated with a great number of elegant white tears. This concrete juice consists of two-thirds of gum and one-third of resin, and volatile oil, in which its taste and smell reside. It yields all its virtues to alkohol. Triturated with water, it forms a milk-like mixture, the resin being diffused by the medium of the gum. Distilled with water, it affords a small quantity of essential oil. It is the most powerful of all the fœtid gums, and is a most valuable remedy. It is most commonly employed in hysteria, hypocondriasis, some symptoms of dyspepsia, flatulent colics, and in most of those diseases termed nervous, but its chief use is derived from its antispasmodic effects; and it is thought to be the most powerful remedy we possess, for those peculiar convulsive and spasmodic affections, which often recur in the first of these diseases, both taken into the stomach and in the way of enema. It is also recommended as an emmenagogue, anthelmintic, antiasthmatic, and anodyne. Dr. Cullen prefers it as an expectorant to gum ammoniacum. Where we wish it to act immediately as an antispasmodic, it should be used in a fluid form, as that of tincture, from half a drachm to two drachms. When given in the form of a pill, or triturated with water, its usual dose is from 5 to 20 grs. When in the form of enema, one or two drachms are to be diffused in eight ounces of warm milk or water. It is sometimes applied externally as a plaster and stimulating remedy, in hysteria, &c.

Fe'rula mi'nor. All-heal of Æsculapius; this plant is said to be detergent.

Ferula'cca. The ferula galbanifera.

Fever. See *Febris.*

Feverfew. See *Matricaria.*

Fi'ber. (From *fiber*, extreme, because it resides in the extremities of lakes and rivers.) The beaver. *Castor fiber*, of Linnæus; it has two excretory follicles near the anus, filled with an unctuous substance called castor. See *Castor.*

FIBRE. *Fibra.* An anatomical term for a very simple filament supposed to be composed of earthy particles, connected together by an intermediate gluten. It is owing to the different arrangements of the fibres that the cellular structure, membranes, muscles, vessels, nerves, and, in short, every part of the body, except the fluids, are formed.

Fibre muscular. See *Muscular fibre.*

Fi'brine. The coagulable lymph is so termed by the French.

FI'BULA. (*Quasi figilula*; from *figo*, to fasten; so named because it joins together the tibia and the muscles.) A long bone of the leg, situated on the outer side of the tibia, and which forms, at its lower end, the outer ankle. Its upper extremity is formed into an irregular head, on the inside of which is a slightly concave articulating surface, which, in the recent subjects, is covered with cartilage, and receives the circular flat surface under the edge of the external cavity of the tibia. This articulation is surrounded by a capsular ligament, which is farther strengthened by other strong ligamentous fibres, so as to allow only a small motion backwards and forwards.—Externally, the head of the fibula is rough and protuberant, serving for the attachment of ligaments, and for the insertion of the biceps cruris muscle.—Immediately below it, on its inner side, is a tubercle, from which a part of the gastrocnemius internus has its origin. Immediately below this head the body of the bone begins. It is of a triangular shape, and appears as if it were slightly twisted at each end, in a different direction. It is likewise a little curved inwards and forwards. This curvature is in part owing to the action of muscles: and in part perhaps to the carelessness of nurses.—Of the three angles of the bone, that which is turned towards the tibia is the most prominent, and serves for the attachment of the interosseous ligament, which, in its structure and uses, resembles that of the fore-arm, and, like that, is a little interrupted above and below. The three surfaces of the bone are variously impressed by different muscles. About the middle of the posterior surface is observed a passage for the medullary vessels, slanting downwards. The lower end of the fibula is formed into a spongy, oblong head, externally rough and convex, internally smooth and covered with a thin cartilage, where it is received by the external triangular depression at the lower end of the tibia. This articulation, which resembles that of its upper extremity, is furnished with a capsular ligament, and farther strengthened by ligamentous fibres, which are stronger and more considerable than those before described. They extend from the tibia to the fibula, in an oblique direction, and are more easily discernible before than behind. Below this the fibula is lengthened out, so as to form a considerable process, called *malleolus externus*, or the outer ankle. It is smooth, and covered with cartilage on the inside, where it is contiguous to the astragalus, or first bone of the foot. At the lower and inner part of this process there is a spongy cavity, filled with fat; and a little beyond this, posteriorly, is a cartilaginous groove, for the tendons of the peroneus longus and peroneus brevis, which are here bound down by the ligamentous fibres that are extended over them.

The principal uses of this bone seem to be, to afford origin and insertion to muscles, and to contribute to the articulation of the leg with the foot.

Fica'ria. (From *ficus*, a fig, so called from its likeness.) The herb figwort, or pile-wort, the *ranunculus ficaria* of Linnæus.

Fica'tio. (From *ficus*, a fig.) Tubercles near the anus and pudenda.

Ficoide'a. *Ficoides.* Resembling a fig. A name of the houseleek, which is emollient.

FI'CUS. 1. A fleshy excresence about the anus, in figure resembling a fig.

2. The name of a genus of plants in the Linnæan system. Class, *Polygamia*. Order, *Dioecia*. The fig-tree.

Fi'cus ca'rica. The systematic name of the fig-tree. *Carica. Ficus. Ficus vulgaris. Ficus communis.* Συκη of the Greeks. The fig. The plant which affords this fruit is the *Ficus Carica* of Linnæus. French figs are, when completely ripe, soft, succulent, and easily digested, unless eaten in immoderate quantities, when they are apt to occasion flatulency, pain of the bowels, and diarrhœa. The dried fruit, which is sold in our shops, is pleasanter to the taste, and more wholesome and nutritive. They are directed in the *decoctum hordei compositum*, and in the *electuarium lenitivum*. Applied externally, they promote the suppuration of tumours; hence they have a place in maturating cataplasms; and are very convenient to apply to the gums, and, when boiled with milk, to the throat.

Fi'cus i'ndica. See *Lacca*.

Fidicina'les. (*Fidicinalis, sc. musculus.*) See *Lumbricales*.

FIENUS, Thomas, was son of a physician of Antwerp, and born in 1567. After studying at Leyden and Bologna, he was invited, at the age of 26, to be one of the medical professors at Louvaine, where he took his degrees. With the exception of one year, during which he attended the Duke of Bavaria, he remained in that office till his death in 1631. Besides his great abilities in medicine and surgery, he was distinguished for his knowledge of natural history, the learned languages, and the mathematics. He has left several works: the chief of which is termed "Libri Chirurgici XII." treating of the principal operations; it passed through many editions. His Father, *John*, was author of a well received treatise, "De Flatibus."

Figs. See *Ficus carica*.

Figwort. See *Ranunculus ficaria*.

Fila'go. Cud or cotton-weed; an astringent.

FI'LAMENT. (*Filamentum*; from *filum*, a thread.) A term applied in anatomy to a small thread-like portion adhering to any part, and frequently synonymous with fibre. See *Fibre*.

File'llum. (From *filum*, a thread, because it resembles a string.) The frænum of the penis.

File'tum. (From *filum*, a thread; named from its string-like appearance.) The frænum of the tongue.

Fili'cula. (Dim. of *filix*, fern; a small sort of fern; or from *filum*, a thread, which it resembles.) Common maiden-hair. See *Adianthum capillus Veneris*.

FILIPE'NDULA. (From *filum*, a thread, and *pendeo*, to hang; so named because the numerous bulbs of its roots hang, as it were, by small threads.) See *Spiræa filipendula*.

Filipe'ndula aqua'tica. Water-dropwort.

Fi'lius a'nte pa'trem. Any plant whose flower comes out before the leaf, as coltsfoot.

FI'LIX. (From *filum*, a thread; so called from its being cut, as it were, in slender portions, like threads.) Fern. See *Polypodium filix mas*.

Fi'lix aculea'ta. See *Polypodium aculeatum*.

Fi'lix fœ'mina. See *Pteris aquilina*.

Fi'lix flo'rida. See *Osmunda regalis*.

Fi'lix mas. See *Polypodium filix mas*.

FILTRA'TION. (*Filtratio*; from *filtrum*, a strainer.) A method of rendering fluids clear, by passing them through a porous solid, as the filtering stone, compact close linen, woollen cloths, or porous paper, which is generally used for this purpose, as a lining to a funnel, or other such vessel. Filtration is also performed on a principle somewhat different, as by immersing one end of a porous substance, as a piece of list, skein of cotton, or slip of thick paper, or other such substance, moistened in its whole length in the fluid, and allowing the other end of it to hang down, over the outside of the vessel. The fluid in this depending part drains out by its own gravity, and is supplied by capillary attraction from the portion next within the vessel, which is supplied in the same manner from the surface of the fluid, till the whole passes over, unless too deep, the list, &c. appearing to act as syphons.

FI′LTRUM. A filter, straining or filtering instrument.

Fi′lum arsenica′le. Corrosive sublimate.

FI′MBRIÆ. (*Fimbria*, a fringe. *Quasi finibria*; from *finis*, the extremity.) The extremities of the Fallopian tubes. See *Uterus.*

Finckle. See *Anethum fœniculum.*

Fine leaved water hemlock. See *Phellandrium aquaticum.*

Finochio. The Italian name of the sweet azorian fennel.

Fir-tree. See *Pinus.*

Fir, balsam of Gilead. See *Pinus balsamea.*

Fir, Canada. See *Pinus balsamea.*

Fir, Norway spruce. See *Pinus abies.*

Fir, Scotch. See *Pinus sylvestris.*

Fir, silver. See *Pinus picea.*

FIRE. *Ignis.* A very simple and active element, the principal agent in nature to balance the power and natural effect of attraction. The most useful acceptation of the word fire comprehends *heat* and *light.* There have been several theories proposed respecting fire, but no one as yet is fully established. See *Caloric* and *Light.*

Firmi′sium minera′lium. Antimony.

FISCHER, John Andrew, son of an apothecary at Erfurt, was born in 1667. He graduated there, and was appointed in succession to several professorships; but that of pathology and the practice of medicine he did not receive till the age of 48. He acquired considerable reputation in his profession; and he had been ten years physician to the court of Mayence; when he died in 1729. Among several minor works he was author of some of greater importance; as the "Consilia Medica," in three volumes, the "Responsa Practica," and a Synopsis of Medicine, facetiously termed "Ilias in Nuce."

Fish-glue. See *Ichthyocolla.*

FISSU′RA MA′GNA SY′LVII. The anterior and middle lobes of the cerebrum on each side are parted by a deep narrow sulcus, which ascends obliquely backwards from the temporal ala of the os sphenoides, to near the middle of the os parietale, and this sulcus is thus called.

FISSURE. *Fissura.* That species of fracture in which the bone is slit, but not completely divided.

Fistic-nut. See *Pistachia vera.*

FI′STULA. (*Quasi fusula*: from *fundo*, to pour out; or from its similarity to a pipe, or reed.) *Eligii morbus.* A term in surgery, applied to a long and sinuous ulcer that has a narrow opening, and which sometimes leads to a larger cavity; and has no disposition to heal. No technical term has been more misapplied: and no misinterpretation of a word has had worse influence in practice than this. Many simple healthy abscesses, with small openings, have too often been called *fistulous*; and, the treatment pursued has in reality at last rendered them so, and been the only reason of their not having healed.

Fistula′ria. (From *fistula*, a pipe: so called because its stalk is hollow.) A name for stavesacre.

Five-leaved grass. See *Potentilla reptans.*

Fixed air. See *Carbonic acid.*

FIXED BODIES. Chemists give this name to those substances which cannot be caused to pass by a strong rarefaction from the solid or liquid state to that of an elastic fluid.

Flag, sweet. See *Acorus calamus.*

Flag, yellow water. See *Iris pseudacorus.*

Fla′mmula. (Dim. of *flamma*, a fire, named from the burning pungency of its taste.) See *Ranunculus flammula.*

Fla′mmula jo′vis. See *Clematis recta.*

FLATULENT. Windy.

Flax-leaved daphne. See *Daphne Gnidium.*

Flax, purging. See *Linum catharticum.*

Flax, spurge. See *Daphne gnidium.*

Flea-wort. See *Plantago Psyllium.*

Fle′men. (From *flecto*, to incline downwards.) *Flegmen.* A tumour about the ankles.

Flere′sin. Gout.

FLE′XOR. The name of several muscles whose office it is to bend parts into which they are inserted.

Fle′xor accesso′rius digito′rum pe′dis. See *Flexor longus digitorum pedis.*

FLE′XOR BRE′VIS DIGITO′RUM PE′DIS, PERFORA′TUS, SUBLI′MIS. *Flexor brevis digitorum pedis perforatus* of Albinus. *Flexor brevis* of Douglas. *Flexor digitorum brevis, sive perforatus pedis* of Winslow. *Perforatus, seu flexor secundi internodii digitorum pedis* of Cowper, and *calcano sus-phalangettien commun* of Dumas. A flexor muscle of the toes, situated on the foot. It arises by a narrow, tendinous, and fleshy beginning, from the inferior protuberance of the os calcis. It likewise derives many of its fleshy fibres from the adjacent aponeurosis, and soon forms a thick belly, which divides into four portions. Each of these portions terminates in a flat tendon, the fibres of which decussate, to afford a passage to a tendon of the long flexor, and afterwards re-uniting, are inserted into the second phalanx of each or the four lesser toes. This muscle serves to bend the second joint of the toes.

FLE'XOR BRE'VIS MINI'MI DI'GITI PE'DIS. *Parathenar minor* of Winslow. This little muscle is situated along the inferior surface and outer edge of the metatarsal bone of the little toe. It arises tendinous from the basis of that bone, and from the ligaments that connect it to the os cuboides. It soon becomes fleshy, and adheres almost the whole length of the metatarsal bone, at the anterior extremity of which it forms a small tendon, that is inserted into the root of the first joint of the little toe. Its use is to bend the little toe.

FLE'XOR BRE'VIS PO'LLI'CIS MA'NUS. *Flexor secundi internodii* of Douglas. *Thenar* of Winslow. *Flexor primi et secundi ossis pollicis* of Cowper, and *Carpophalangien du pouce* of Dumas. This muscle is divided into two portions by the tendon of the flexor longus pollicis. The outermost portion arises tendinous from the anterior part of the os trapezoides and internal annular ligament. The second, or innermost, and thickest portion, arises from the same bone, and likewise from the os magnum, and os cuneiforme. Both these portions are inserted tendinous into the sesamoid bones of the thumb. The use of this muscle is to bend the second joint of the thumb.

FLE'XOR BRE'VIS PO'LLICIS PE'DIS. *Flexor brevis* of Douglas. *Flexor brevis pollicis* of Cowper, and *Tarsophalangien du pouce* of Dumas. A muscle of the great toe, that bends the first joint of that part. It is situated upon the metatarsal bone of the great toe, arises, tendinous from the under and anterior part of the os calcis, and from the under part of the os cuneiforme externum. It soon becomes fleshy and divisible into two portions which do not separate from each other till they have reached the anterior extremity of the metatarsal bone of the great toe, where they become tendinous, and then the innermost portion unites with the tendon of the abductor, and the outermost with that of the adductor pollicis. They adhere to the external os sesamoideum, and are finally inserted into the root of the first joint of the great toe. These two portions, by their separation, form a groove, in which passes the tendon of the flexor longus pollicis.

FLE'XOR CA'RPI RADIA'LIS. *Radialis internus* of Albinus and Winslow, and *Epitrochlo-metacarpien* of Dumas. This is a long thin muscle, situated obliquely at the inner and anterior part of the fore-arm, between the palmaris longus and the pronator teres. It arises tendinous from the inner condyle of the os humeri, and, by many fleshy fibres, from the adjacent tendinous fascia. It descends along the inferior edge of the pronator teres, and terminates in a long, flat, and thin tendon, which afterwards becomes narrower and thicker, and, after passing under the internal annular ligament, in a groove distinct from the other tendons of the wrist, it spreads wider again, and is inserted into the fore and upper part of the metacarpal bone that sustains the fore finger. It serves to bend the hand, and its oblique direction may likewise enable it to assist in its pronation.

FLE'XOR CA'RPI ULNA'RIS. *Ulnaris internus* of Winslow and Albinus. *Epitrochli-cubito carpien* of Dumas. A muscle situated on the cubit or fore-arm, that assists the former in bending the arm. It arises tendinous from the inner condyle of the os humeri, and, by a small fleshy origin, from the anterior edge of the olecranon. Between these two portions, we find the ulnar nerve passing to the fore-arm. Some of its fibres arise likewise from the tendinous fascia that covers the muscles of the fore-arm. In its descent, it soon becomes tendinous, but its fleshy fibres do not entirely disappear till it has reached the lower extremity of the ulna, where its tendon spreads a little, and, after sending off a few fibres to the external and internal and annular ligaments, is inserted into the os pisiforme.

FLE'XOR LO'NGUS DIGITO'RUM PE'DIS PROFU'NDUS PE'RFORANS. *Perforans seu flexor profundus* of Douglas, *Flexor digitorum longus, sive perforans pedis*, and *perforans seu flexor tertii internodii digitorum pedis* of Cowper, and *Tibio phalangetien* of Dumas. A flexor muscle of the toes, situated along the posterior part and inner side of the leg. It arises fleshy from the back part of the tibia, and, after running down to the internal ankle, its tendon passes under a kind of annular ligament, and then through a sinuosity at the inside of the os calcis. Soon after this it receives a small tendon from the flexor longus pollicis pedis, and about the middle of the foot it divides into four tendons, which pass through the slits of the flexor brevis digitorum pedis, and are inserted into the upper part of the last bone of all the lesser toes. About the middle of the foot, this muscle unites with a fleshy portion, which, from the name of its first describer, has been usually called *massa carnea Jacobi Sylvii*: it is also termed *Flexor accessorius digitorum pedis*. This appendage arises by a thin fleshy origin, from most part of the sinuosity of the os calcis, and likewise by a thin tendinous beginning from the anterior part of the external tubercle of that bone; it soon becomes all fleshy, and unites to the long flexor just before it divides into its four tendons. The use of this muscle is to bend the last joint of the toes.

FLE′XOR LO′NGUS PO′LLICIS MA′NUS. *Flexor longus pollicis* of Albinus. *Flexor tertii internodii* of Douglas. *Flexor tertii internodii sive longissimus pollicis* of Cowper, and *radio-phalangetien du pouce* of Dumas. This muscle is placed at the side of the flexor longus digitorum pedis, profundus, perforans, and is covered by the extensores carpi radiales. It arises fleshy from the anterior surface of the radius, immediately below the insertion of the biceps, and is continued down along the oblique ridge, which serves for the insertion of the supinator brevis, as far as the pronator quadratus. Some of its fibres spring likewise from the neighbouring edge of the interosseous ligament. Its tendon passes under the internal annular ligament of the wrist, and after running along the inner surface of the first bone of the thumb, between the two portions of the flexor brevis pollicis, goes to be inserted into the last joint of the thumb, being bound down in its way by the ligamentous expansion that is spread over the second bone. In some subjects we find a tendinous portion arising from the inner condyle of the os humeri, and forming a fleshy slip that commonly terminates near the upper part of the origin of this muscle from the radius. The use of this muscle is to bend the last joint of the thumb.

FLE′XOR LO′NGUS PO′LLICIS PE′DIS. This muscle is situated along the posterior part of the leg. It arises tendinous and fleshy a little below the head of the fibula, and its fibres continue to adhere to that bone almost to its extremity. A little above the heel it terminates in a round tendon, which, after passing in a groove formed at the posterior edge of the astragalus, and internal and lateral part of the os calcis, in which it is secured by an annular ligament, goes to be inserted into the last bone of the great toe, which it serves to bend.

FLE′XOR O′SSIS METACA′RPI PO′LLICIS. *Seu opponens pollicis* of Innes. *Opponens pollicis manus* of Albinus. *Flexor primi internodii* of Douglas. *Antithenar sive semi-interosseus pollicis* of Winslow, and *carpo phalangien du pouce* of Dumas. This muscle is situated under the abductor brevis pollicis, which it resembles in its shape. It arises tendinous and fleshy from the os scaphoides, and from the anterior and inner part of the internal annular ligament. It is inserted tendinous and fleshy into the under and anterior part of the first bone of the thumb. It serves to turn the first bone of the thumb upon its axis, and at the same time to bring it inwards opposite to the other fingers.

FLE′XOR PA′RVUS MI′NIMI DI′GITI. *Abductor minimi digiti, Hypothenar Riolani* of Douglas. *Hypothenar minimi digiti* of Winslow, and second *carpo-phalangien du petit doigt* of Dumas. The situation of this muscle is along the inner surface of the metacarpal bone of the little finger. It arises tendinous and fleshy from the hook-like process of the unciform bone, and likewise from the anterior surface of the adjacent part of the annular ligament. It terminates in a flat tendon, which is connected with that of the abductor minimi digiti, and inserted into the inner and anterior part of the upper end of the first bone of the little finger. It serves to bend the little finger, and likewise to assist the abductor.

FLE′XOR PROFU′NDUS PE′RFORANS. *Profundus* of Albinus. *Perforans* of Douglas. *Perforans vulgo profundus* of Winslow. *Flexor tertii internodii digitorum manus, vel perforatus manus* of Cowper, and *cubito-phalangetien commun* of Dumas. This muscle is situated on the fore-arm, immediately under the perforatus, which it greatly resembles in its shape. It arises fleshy from the external side, and upper part of the ulna, for some way downwards, and from a large portion of the interosseus ligament. It splits into four tendons a little before it passes under the annular ligament of the wrist, and these pass through the slit in the tendons of the flexor sublimis, to be inserted into the fore and upper part of the third or last bone of all the four fingers, the joint of which they bend.

FLE′XOR SUBLI′MIS PERFO′RATUS. This muscle, which is the *perforatus* of Cowper, Douglas, and Winslow, is by Albinus and others named *sublimis.* It has gotten the name of perforatus from its tendons being perforated by those of another flexor muscle of the finger, called the *perforans.* They who give it the appellation of *sublimis,* consider its situation with respect to the latter, and which, instead of *perforans,* they name *profundus.* It is a long muscle, situated most commonly at the anterior and inner part of the fore-arm, between the palmaris longus and the flexor carpi ulnaris; but, in some subjects, we find it placed under the former of these muscles, between the flexor carpi ulnaris and the flexor carpi radialis. It arises, tendinous and fleshy, from the inner condyle of the os humeri, from the inner edge of the coronoid process of the ulna, and from the upper and fore part of the radius, down to near the insertion of the pronator teres. A little below the middle of the fore-arm, its fleshy belly divides into four portions, which degenerate into as many round tendons, that pass all together under the internal annular ligament of the wrist, after which they separate from each other, become thinner and flatter, and running along the palm of the hand, under the aponeurosis palmaris, are inserted into the upper part of the second bone of each finger. Previous to this insertion, however, the fibres of each tendon decussate near the extremity of the first bone, so as to afford a passage to a tendon of the perforans. Of these four tendons, that of the middle finger is the largest, that of the fore-finger the next in size, and that of the little-finger the smallest. The use of this muscle is to bend the second joint of the fingers.

Fle'xor te'rtii interno'dii. See *Flexor longus pollicis manus.*

Flo'res be'nzoes. See *Benzoic acid.*

Flo'res martia'les. See *Ferrum ammoniatum.*

Flo'res sa'lis ammo'niaci. See *Ammoniæ subcarbonas.*

Flo'res sulphu'ris. See *Sulphur.*

Flo'res sulphu'ris lo'ti. See *Sulphur lotum.*

Flowers. A term formerly applied by chemists to the fine parts which are sublimated from certain bodies, as the flowers of benjamin, sulphur, zinc, &c.

Flower-de-luce. See *Iris germanica.*

Flowers of Benjamin. See *Benzoic acid.*

FLOYER, Sir John, was born at Hinters, in Staffordshire, about the year 1649, and graduated at Oxford. He then settled at Litchfield, where his attention and skill procured him extensive reputation, insomuch that he was honoured with knighthood, as a reward for his talents. He strongly advocated the use of cold bathing, particularly in chronic rheumatism, and nervous disorders: and he ascribed the increasing prevalence of consumption to the discontinuance of the practice of baptizing children by immersion. He published several works on this and other subjects; particularly an excellent treatise on the Asthma, under which he himself laboured from the time of puberty, notwithstanding which he lived to be an old man. He is said to have been one of the first, who reckoned the number of pulsations by a time-piece.

FLUATE. A salt formed by the fluoric acid, combined with different bases: thus, fluate of lime, &c.

FLUCTUA'TION. A term used by surgeons, to express the undulation of a fluid; thus, when pus is formed in an abscess, or when water accumulates in the abdomen, if the abscess or abdomen be lightly pressed with the fingers, the motion of fluctuation may be distinctly felt.

Fluellin. See *Antirrhinum elatine.*

FLUID. A fluid is that, the constituent particles of which so little attract each other, that, when poured out, it drops *guttatim*, and adapts itself, in every respect, to the form of the vessel containing it.

Fluids of the body. This term is often applied to the blood, and other humours of which the body is composed. The drying of any part of the human body demonstrates, that by far the greater part consists of fluid. The quantity of fluid in a man of one hundred and sixty pounds weight, is estimated at one hundred and thirty-five pounds. The fluids of the human body are divided into, 1. *Crude*, or those which have not yet entirely put on the animal nature, as the chyme and chyle. 2. *Sanguineous;* to this is referred the blood, or the cruor of the blood. 3. *Lymphatic*, which are those of the lymphatic vessels, and the nutritious jelly. 4. *Secreted;* to this head are referred all those separated from the blood, which are very numerous. 5. *Excrementitious*, which are eliminated from the body, as the alvine fæces, urine, cutaneous, and pulmonary perspirable matter, &c.

The secreted humours are divided into, 1. *Lacteal*, which are white; as the milk, juice of the prostate glands, &c. 2. *Aqueous*, as the aqueous humour of the eye. 3. *Mucous*, as the mucus of the nostrils and primæ viæ. 4. *Albuminous*, as the serum of the blood. 5. *Oleous*, as the oil of the adipose membrane. 6. *Bilious*, as the bile and wax of the ears.

The fluids of the human body are also divided from their motion into, 1. *Circulating*, which continually circulate in the vessels. 2. *Commorant*, which circulate with a slow motion as the oil of the adipose membrane and male semen. 3. *Stagnant*, which remain for a certain time in any receptacle, as cystic bile, urine, and the alvine fæces.

Flu'or a'lbus. See *Leucorrhœa.*

FLU'OR SPAR. Vitreous spar. Sparry fluor. Derbyshire spar. A species of salt which abounds in nature, formed by the combination of the fluoric acid with lime. It is called spar, because it has the sparry form and fracture: fluor, because it melts very readily; and vitreous, because it has the appearance of glass, and may be fused into glass of no contemptible appearance.

FLU'ORIC A'CID. The acidifiable base of fluoric acid is unknown; for no experiments have yet been made by which it can be exhibited. It is merely from general inference, that we may conjecture it to consist of a simple acidifiable basis united to oxygen.

This acid is to be obtained by putting one part of finely pulverised fluate of lime into a leaden retort, and pouring upon it two parts and a half of sulphuric acid. Lute the retort to a receiver of the same metal, and apply a gentle heat while the receiver is kept cool with a mixture of salt and snow. The fluoric acid will be obtained in the liquid form, which must be kept in well closed leaden or silver bottles, or phials coated within with wax, or varnish.

The distinguishing property of fluoric acid is, its power of dissolving and volatilizing silex. On being exposed to a moist atmospheric air, it emits white fumes which are very deleterious; and the liquid acts as a powerful corrosive. Its action upon all the inflammable substances is very feeble; it does not afford oxygen to them. It has no action upon most of the metals, but it dissolves many of their oxides.

Fluoric acid united to different bases, forms saline compounds called Fluates.

FLUO'RIC A'CID GAS. This is obtained when silex is added to the materials affording fluoric acid, or when vessels of glass are used; and it appears always to contain silex, whence it has been called silicated fluoric acid. It is heavier than atmospheric air. It does not maintain combustion, nor can animals breathe it. It is absorbed by water, depositing silex, and forms with it liquid fluoric acid. It has a penetrating odour, approaching nearly to that of muriatic acid gas. It corrodes animal and vegetable matters. Light has no effect upon it. It emits white fumes, in contact with moist atmospheric air. It is very sour, and therefore reddens blue vegetable colours. It precipitates lime-water. With ammonia it unites and forms a concrete body. It has no action upon platina, gold, silver, mercury, tin, lead, antimony, cobalt, nickel, and bismuth; but it attacks iron, arsenic, and manganese.

Flux. This word is mostly employed for *dysenteria.*

FLUXION. A term mostly applied by chemists, to signify the change of metals, or other bodies, from the solid into the fluid state, by the application of heat. See *Fusion.*

Fly, Spanish. See *Lytta.*

Fo'cile ma'jus. The ulna and the radius are occasionally denominated by the barbarous appellations of focile majus and minus; the tibia and fibula in the leg are also so called.

Fo'cus. A lobe of the liver.

Fodi'na. (From *fodio*, to dig.) A quarry. The labyrinth of the ear.

Fœnicula'tum li'gnum. A name for sassafras.

FŒNI'CULUM. (*Quasi fœnum oculorum*, the hay or herb good for the sight; so called because it is thought good for the eyes.) Fennel. See *Anethum.*

Fœni'culum alpi'num. The herb spignel.

Fœni'culum a'nnuum. Royal cummin.

Fœni'culum aqua'ticum. See *Phellandrium aquaticum.*

Fœni'culum du'lce. See *Anethum fœniculum.*

Fœni'culum germa'nicum. See *Anethum fœniculum.*

Fœni'culum mari'num. Samphire.

Fœni'culum orienta'le. Cuminum.

Fœni'culum porci'num. See *Peucedanum.*

Fœni'culum sine'nse. Aniseed.

Fœni'culum sylve'stre. Bastard spignel.

Fœni'culum tortuo'sum. French hartwort.

Fœni'culum vulga're. See *Anethum fœniculum.*

Fœ'num camelo'rum. See *Juncus odoratus.*

Fœ'num græ'cum. (*Fœnum*, hay, and *græcus*, belonging to Greece; because, in Greece, it grew in the meadows, like hay.) See *Trigonella fœnum græcum.*

Fœ'num sylve'stre. Wild fenugreek.

FOESIUS, Anutius, was born at Mentz, in 1528, and received his education at Paris, were he imbibed a strong predilection for the Greek language, and particularly the works of Hippocrates. Returning to his native place about the age of 28, his talents soon procured him such extensive reputation, that several princes endeavoured to allure him to their respective courts, but without success. The practice of his profession, instead of weakening his attachment to Hippocrates, only stimulated him to a more profound study of his writings; where he found the most correct delineations of diseases, and the most important observations concerning them, made about two thousand years before. He first published an excellent Latin translation and commentary on his second book of Epidemics; then an explanation of the terms used by him, under the title of "Œconomia Hippocratis;" and lastly, at the solicitation of the chief physicians of Europe, he undertook a complete correct edition of his works, with an interpretation and notes, which he accomplished in six years, in such a manner, as to rank him among the ablest interpreters of the antients. He was also author of a Pharmacopœia for his native city; and died in 1595.

Fœta'bulum. (From *fœteo*, to become putrid.) An encysted abscess, or foul ulcer.

FŒ'TUS. (From *feo*, to bring forth, according to Vossius.) *Epicyema. Epigonion.* The child enclosed in the uterus of its mother, is called a fœtus from the fifth month after pregnancy until the time of its birth. The internal parts peculiar to the fœtus, are the thymus gland, canalis venosus, canalis arteriosus, foramen ovale, and the membrana pupillaris. Besides these peculiarities, there are other circumstances in which the fœtus differs from the adult. The lungs are black and collapsed, and sink in water; the liver is very large; all the glands, especially the thymus and suprarenal, and the vermiform process of the cœcum, are also considerably larger in proportion. The teeth of the fœtus are hid within their sockets; the great intestines contain a substance called meconium; the membrana tympani is covered with a kind of mucous membrane, and the bones in many places are cartilaginous.

Folia'ta te'rra. (From its resemblance to *folium*, a leaf.) Sulphur, also the acetas potassæ.

Fo'lium orienta'le. See *Cassia senna.*

FO'LLICLE. (*Folliculus*; dim. of *follis*, a bag.) See *Folliculose gland.*

FOLLICULOSE GLAND. Follicle. One of the most simple species of gland, consisting merely of a hollow vascular membrane or follicle, and an excretory duct; such are the muciparous glands, the sebaceous, &c.

Folli'culus fe'llis. The gall-bladder.

FOMENTA'TION. *Fomentatio.* A sort of partial bathing, by applying hot flannels to any part, dipped in medicated decoctions, whereby steams are communicated to the diseased parts, their vessels are relaxed, and their morbid action sometimes removed.

Fo'mes ventri'culi. Hypochondriacism.

Fo'mites. A term mostly applied to substances imbued with contagion.

Fons pulsa'tilis. See *Fontanella.*

FONTANE'LLA. (Dim. of *fons*, a fountain.) *Fons pulsatilis.* The parietal bones and the frontal do not coalesce until the third year after birth, so that, before this period, there is an obvious interstice, commonly called *mould*, and scientifically the *fontanel*, or *fons pulsatilis.* There is also a lesser space, occasionally, between the occipital and parietal bones, termed the *posterior fontanel.* These spaces between the bones are filled up by the dura mater, pericranium and external integuments, so that during birth, the size of the head may be lessened; for, at that time, the bones of the head, upon the superior part, are not only pressed nearer to each other, but they frequently lap over one another, in order to diminish the size during the passage of the head through the pelvis.

Fontane'lla ante'rior. See *Fontanella.*

Fontane'lla poste'rior. See *Fontanella.*

FONTI'CULUS. (Dim. of *fons*, an issue.) An artificial ulcer formed in any part, and kept discharging by introducing daily a pea, covered with any digestive ointment.

FORA'MEN. (From *foro*, to pierce.) A little opening.

FORA'MEN CŒ'CUM. A single opening in the basis of the cranium between the ethmoid and the frontal bone, that gives exit to a small vein. Also the name of a a hole in the middle of the tongue.

FORA'MEN LA'CERUM IN BA'SI CRA'NII. See *Foramina lacera.*

FORA'MEN LA'CERUM ORBITA'LE SUPE'RIUS. A large opening between the greater and lesser wing of the sphenoid bone on each side, through which the third, fourth, first branch of the fifth, and the sixth pair of nerves, and the ophthalmic artery pass.

FORA'MEN O'PTICUM. The hole transmitting the optic nerve.

FORA'MEN OVA'LE. The opening between the two auricles of the heart of the fœtus. See also *Innominatum os.*

Fora'men of Winslow. An opening in the omentum. See *Omentum.*

FORA'MINA LA'CERA. A pair of foramina in the basis of the cranium, through which the internal jugular veins, and the eighth pair and accessary nerves pass.

Forami'nulum os. The ethmoid bone.

FO'RCEPS. (*-cipis*, f. *quasi ferriceps*, as being the iron with which we seize any thing hot, from *ferrum*, iron, and *capio*, to take.) Pincers. A surgical instrument with which extraneous bodies or other substances are extracted. Also an instrument occasionally used by men midwives to bring the head of the fœtus through the pelvis.

FORDYCE, George, was born at Aberdeen, in 1736, after the death of his father, and his mother having married again, he was sent to Fouran when about two years old, where he received his school education; and thence returned to Aberdeen, where he was made master of arts, when only fourteen. Having evinced an inclination to medicine, he was soon after sent to his uncle, Dr. John Fordyce, who practised at Uppingham, with whom he remained several years. He then studied at Edinburgh, where he graduated in 1758, having defended a thesis on catarrh: after which he went to Leyden, principally to improve himself in anatomy under Albinus. The following year he settled in London, and began to give lectures on chemistry; and in 1764, he undertook also to teach the practice of physic, and the materia medica: these subjects occupied him nearly three hours every morning, except on Sunday, for about thirty years successively. In 1770, he was chosen physician to St. Thomas's-hospital, and six years after a Fellow of the Royal Society: also in 1787 he was admitted a Fellow of the College of Physicians; having been a licentiate for twenty-two years before. In 1793 he assisted in forming a small society for the improvement of Medical and Chirurgical Knowledge, which has since published three volumes of their Transactions. He died in 1802. The countenance of Dr. Fordyce was by no means expressive of his powers of mind, he was rather negligent of his dress, and not sufficiently pleasing in his manners, to enable him to get into very extensive practice: besides he was too fond of the pleasures of society, to which he often sacrificed the hours, that should have been dedicated to sleep. The vigour of his constitution long resisted these irregularities; but at length they brought on the gout, which was followed by dropsy, and this terminated his existence. He possessed a remarkably strong memory, which enabled him to lecture without any notes, and to compose his works for publication without referring to authors, which he had before read: and his having relied too much on this faculty may help to explain the want of method and elegance, and the many inaccuracies, which appear in his writings. He was author of several publications on Medical and Philosophical subjects; many of which are to be found in the Transactions of the societies to which he belonged. The most esteemed, and that on which he employed most labour, was a series of "Dissertations on Fever;" four of them appeared during his life, and another was left in manuscript, which has since been printed. His Treatise on Digestion, was read originally as the Gulstonian Lecture before the College of Physicians. He was the projector of the Experiments in heated rooms, of which Sir Charles Blagden gave an account.

FORDYCE, Sir William, was born at Aberdeen in 1724. At the age of eighteen, having acquired a competent knowledge of physic and surgery, he went into the army; and the support of the friends, whom he there procured, together with his own merit, soon brought him into great practice, when he afterwards settled in London. The wealth, which he thus acquired, was liberally employed in acts of friendship, and in supporting useful projects; though he had some very severe losses. He wrote a Treatise on Fevers, and on the Ulcerated Sore Throat; on his entering into practice, he likewise published on the Venereal Disease. He died after a long illness in 1792.

FORESTUS, or Van Forest, Peter, was born at Alcmaer in 1522. He was sent to Louvain to study the law, but soon showed a strong inclination to medicine. He therefore cultivated this science at different universities in Italy, and afterwards at Paris; but he graduated at Bologna. After being twelve years settled in his native town, he was invited to Delft, which was ravaged by a contagious epidemic; and being extremely successful in the treatment of this, he received a considerable pension, and was retained as the public physician for nearly thirty years. In 1575 he was prevailed upon to give the first lecture on Medicine at the opening of the University of Leyden. He spent the latter part of his life in his native city, where he died in 1597. He was a very diligent observer of diseases, and shewed often great judgment in anticipating the result, or in treating them successfully. He published at different periods six volumes of Medical and Surgical Cases; to one of which was added a Dissertation, exposing the fallacy and absurdity of pretending to judge of every thing by the urine. Boerhaave has highly commended his writings which have been often reprinted.

Foreskin. See *Præputium.*

FO′RMIATE. *Formias.* A salt produced by the union of the formic acid with different bases: thus, *formiate of ammonia,* &c.

FORMI′CA. (*Quod ferat micas,* because of his diligence in collecting small particles of provision together.) 1. The ant or pismire. This industrious little insect, *Formica rufa* of Linnæus, contains an acid juice, and gross oil, which were supposed to possess aphrodisiac virtues. The chrysalides of this animal are said to be diuretic and carminative, and by some recommended in the cure of dropsy.

2. The name of a black wart with a broad base, and cleft superficies, because the pain attending it resembles the biting of an ant.

3. A varicose tumour on the anus and glans penis.

Formi′ca milia′ris. Any herpetic eruption.

FO′RMIC A′CID. *Acidum formicum.* The acid of ants was known to Tragus, Bauhin, Fisher, Etmuller, Hoffman, and many others. It is obtained chiefly from the red ant, *Formica rufa* of Linnæus, by distilling them in a retort, and by washing them in boiling water. When rectified and rather concentrated, it has a penetrating smell, and is corrosive; and its taste is so agreeable, when greatly diluted with water, that it has been proposed to be used instead of vinegar.

Fo′rmix. The herpes exedens.

FO′RMULA. (Dim. of *forma,* a form.) A little form of prescriptions, such as physicians direct in extemporaneous practice, in distinction from the greater forms in pharmacopœias, &c.

Fo′rnax. *Furnus.* A furnace. A chemical instrument. See *Furnace.*

FO′RNIX. (*Fornix,* an arch or vault.) A part of the corpus callosum in the brain is so called, because, if viewed in a particular direction, it has some resemblance to the arch of an ancient vault. It is the medullary body, composed of two anterior and two posterior crura, situated at the bottom and inside of the lateral ventricle over the third ventricle, and below the septum lucidum.

Fo′rtis a′qua. A weak nitric acid.

FO′SSA. (From *fodio,* to dig.) *Fovea.* A little depression or sinus. The pudendum muliebre.

Fo′ssa amy′ntæ. A double-headed roller for the face.

Fo′ssa ma′gna. The great groove of the ear, also the pudendum muliebre.

Fo′ssa navicula′ris. The cavity at the bottom of the entrance of the pudendum muliebre: also the great groove of the ear.

Fo'ssa ova'lis. The depression in the right auricle of the human heart, which in the fœtus opened into the other auricle, forming the foramen ovale.

Fo'ssa pituita'ria. The fossa of the sella turcica of the sphenoid bone.

FO'SSIL. (*Fossilis*, from *fodio*, to dig.) Any thing dug out of the earth.

Fo'ssilus. The bone of the leg.

FOTHERGILL, John, was born in Yorkshire, in 1712, of a respectable Quaker family. After passing through an apprenticeship to an apothecary, he went to Edinburgh, where he graduated at the age of twenty-four, taking for his inaugural thesis the use of emetics. He then studied for two years at St. Thomas's-hospital, and after an excursion to the continent, settled in London in 1740, and six years after became a licentiate. His practice was for some time chiefly gratuitous; but his "Account of the Putrid Sore Throat," published in 1748, brought him speedily into reputation. He was successively elected a Fellow of the College of Physicians at Edinburgh, of the Royal Society of London, and of some other societies abroad. His early partiality to botany induced him, as his practice increased, to purchase a large piece of ground for the cultivation of rare and valuable plants, in which he spared no expence; neither did he neglect other departments of natural history. He was also an active and liberal promoter of many successful schemes for the public benefit; and particularly in instituting the school at Ackworth in Yorkshire. He was of a rather delicate constitution, but a steady temperance preserved his health, till in 1778 he had an attack of a suppression of urine, occasioned by a disease of the prostate gland; which returning two years after, soon put a period to his existence. He had a quick and comprehensive understanding; and his pleasing address procured him general confidence, which his discretion was not apt to forfeit afterwards. Besides the works already noticed, several papers of Dr. Fothergill were printed in the Philosophical Transactions, and in the Medical Observations and Enquiries: he also sent several communications to the Gentleman's Magazine, and other periodical publications.

Fo'tus. (*Fotus, us*, m.) See *Fomentation.*

FO'VEA. (From *fodio*, to dig.) A little depression. The pudendum muliebre. A partial sweating-bath.

Fox-glove. See *Digitalis.*

Fox-glove, Eastern. See *Sesamum orientale.*

FRACASTORIUS, Hieronymus, was born at Verona in 1483. He made a rapid progress in his studies, and attained early considerable excellence as a poet, philosopher, and astronomer. He was also much valued as a physician, particularly by the general of the Venetian army, whom he attended during several campaigns: but on his dying in 1515, Fracastorius returned to his native place. He corresponded with most of the great men of his age, especially with Cardinal Bembo, to whom he dedicated his poem "Syphilis;" which was thought worthy of comparison with the Georgics of Virgil by some of the best judges. He died in 1553; and a statue was erected to him by the town of Verona. He published also on Contagious Diseases, and several other Medical and Philosophical Subjects.

FRA'CTURE. (*Fractura*; from *frango*, to break.) *Catagma. Clasis. Clasma. Agme.* A fracture is a solution of a bone into two or more fragments. A *simple* fracture is when the bone only is divided. A *compound* fracture is a division of the bone, with a laceration of the integuments, the bone mostly protruding. A fracture is also termed transverse, oblique, &c. according to its direction.

FRÆ'NULUM. (Dim. of *frænum*, a bridle.) The cutaneous fold, under the apex of the tongue, that connects the tongue to the infralingual cavity. It is sometimes, in infancy, so short as to prevent the child from sucking, when it is necessary to cut it, in order to give more room for the motion of the tongue.

FRÆ'NUM. The membranous fold which connects the prepuce to the inferior part of the glans penis.

Fra'ga. (From *fragro*, to smell sweet.) The strawberry. See *Fragaria.*

FRAGARIA. (From *fragro*, to smell sweet.) The strawberry.

1. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Polygynia.*

2. The pharmacopœial name of the strawberry. See *Fragaria vesca.*

Fra'garia ste'rilis. Barren strawberry. Astringent.

Fra'garia vesca. The systematic name of the strawberry. *Fragaria. Fraga.* The mature fruit of the *Fragaria vesca, fragellis reptantibus* of Linnæus, was formerly recommended in gouty and calculous affections, in consequence, it would appear, of its efficacy in removing tartar from the teeth, which it is said to do very effectually.

Fragi'litas o'ssium. *Friabilitas ossium.* Brittleness of the bones.

Fra'gmen. *Fragmentum.* A splinter of a bone.

FRAMBŒ'SIA. (From *framboise*, Fr. for a raspberry.) The yaws. A genus of disease arranged by Cullen in the class *cachexiæ*, and order *impetigines.* It is somewhat similar in its nature to the lues venerea, and is endemial to the Antilles islands, as well as Africa. It appears with excrescences like mulberries growing out of the skin in various parts of the body, which discharge an ichorous fluid.

FRA'NGULA. (From *frango*, to break, so called because of the brittleness of its branches.) See *Rhamnus frangula.*

Frankincense. See *Juniperus Lycia*, and *Pinus abies.*

Fraxine'lla. (From *fraxinus*, the ash, so called because its leaves resemble those of the ash.) See *Dictamnus albus.*

Fraxinella, white. See *Dictamnus albus.*

FRA'XINUS. (*A fragore*, from the noise its seeds make when shaken by the wind; or from φραξις, a hedge, because of its use in forming hedges.) The ash.

1. The name of a genus of plants in the Linnæan system. Class, *Polygamia.* Order, *Dioecia.* The ash.

2. The pharmacopœial name of the ash-tree. See *Fraxinus excelsior.*

Fra'xinus exce'lsior. The systematic name of the ash-tree. *Fraxinus.* Called also *brumelli* and *bumelia.* The bark of this tree, *Fraxinus excelsior; foliis serratis floribus apetalis*, of Linnæus, when fresh, has a moderately strong bitterish taste. It possesses resolvent and diuretic qualities, and has been successfully exhibited in the cure of intermittents. The seeds, are occasionally exhibited medicinally as diuretics, in the dose of a drachm. In warm climates, a sort of manna exudes from this species of fraxinus.

Fra'xinus o'rnus. The systematic name of the tree from which manna flows. This substance is also termed *Manna calabrina. Ros calabrinus. Acromeli. Alusar. Drysomeli.* That species which is of a rosy colour, is called *nuba. Mel aerium*, from the supposition that it descended from heaven. The condensed juice of the flowering ash, or *Fraxinus ornus: foliis ovato-oblongis serratis petiolatis, floribus corollatis.* Hort. Kew. which is a native of the southern parts of Europe, particularly Sicily and Calabria. Many other trees and shrubs have likewise been observed to emit a sweet juice, which concretes upon exposure to the air, and may be considered of the manna kind, especially the *Fraxinus rotundifolia* and *excelsior.* In Sicily, these three species of fraxinus are regularly cultivated for the purpose of procuring manna, and with this view are planted on the declivity of a hill with an eastern aspect. After ten years growth, the trees first begin to yield the manna, but they require to be much older before they afford it in any considerable quantity. Although the manna exudes spontaneously upon the trees, yet, in order to obtain it more copiously, incisions are made through the bark, by means of a sharp crooked instrument; and the season thought to be most favourable for instituting this process, is a little before the dog-days commence, when the weather is dry and serene. Manna is generally distinguished into different kinds, viz. the manna in tear, the canulated and flaky manna, and the common brown or fat manna. All these varieties seem rather to depend upon their respective purity, and the manner in which they are obtained from the plant, than upon any essential difference of the drug. The best manna is in oblong pieces, or flakes, moderately dry, friable, very light, of a whitish, or pale yellow colour, and in some degree transparent: the inferior kinds are moist, unctuous and brown. Manna is well known as a gentle purgative, so mild in its operation, that it may be given with safety to children and pregnant women, to the delicacy of whose frames and situations it is particularly adapted. It is esteemed a good and pleasant auxiliary to the purgative neutral salts. It sheathes acrimony, and is useful in coughs, disorders of the breast, and such as are attended with fever and inflammation, as in pleuritis, &c. It is particularly efficacious in bilious complaints, and helps the discharge of mineral waters, when they are not of themselves sufficiently active. It is apt in large doses to create flatulencies and gripes; both of which are prevented by a small addition of some warm carminatives. It purges in doses of from ℥j to ℥jj; but its purgative quality is much increased, and its flatulent effects prevented, by a small addition of cassia. The dose for children is from one scruple to three. It is best dissolved in whey.

Fra'xinus rotundifo'lia. The systematic name of a tree which affords manna. See *Fraxinus ornus.*

FREIND, John, was born in 1675 at Croton in Northamptonshire, of which his father was rector. After being educated at Westminster he went to Oxford, where he distinguished himself greatly by his classical attainments. Having for some time studied medicine, he communicated to the Royal Society some singular cases: but a work, which he published in 1703, entitled "Emmenologia," explaining the phœnomena of menstruation both natural and morbid, on mechanical principles, first brought him into notice as a physiologist and physician. In the following year he was appointed professor of Chemistry at Oxford, but soon after went to Spain as physician to the English forces; and he took this opportunity of visiting Italy. On his return in 1707, he was created Doctor by diploma, and published his Chemical Lectures in Latin. In 1712 he was chosen a Fellow of the Royal Society; but soon went abroad again with the troops into Flanders. On the conclusion of the peace in the following year he settled in London, and rose to high professional reputation. In 1716 he was received as Fellow of the College of Physicians, and published the first and third books of Hippocrates on Epidemics, with a Commentary on Fevers, in nine parts; a work of great erudition and judgment. Some of his opinions having been severely attacked, he was led to defend them in a letter to Dr. Mead, entitled "De Purgantibus in secundo Variolarum confluentium Febre adhibendis," 1719. A few years after this he got into Parliament, and having warmly sided with the opposition, he was, in common with several persons of consequence, imprisoned on suspicion of high treason: but the minister, Sir Robert Walpole, having fallen sick, Dr. Mead refused to attend him till his friend was liberated; when he made over to him 5000 guineas, which he had received from his patients during his confinement of a few months only. While in the tower, Dr. Freind formed the plan of his great work "The History of Physic from Galen to the beginning of the Sixteenth Century, chiefly with regard to Practice;" which came out in two volumes within three years after. This was intended as a continuation of Le Clerc, and met with a very favourable reception; indeed it still continues to be a standard book. On the accession of George II. he was appointed physician to the Queen; and having died in July 1728, his widow and son experienced the royal protection.

Fre'na. The sockets of the teeth.

Frigida'rium. (From *frigidus*, cold.) The cold bath.

Frigera'na. A putrid fever.

FRONS. (*Frons*, *-tis*, f. or m.) The forehead. The part between the eyebrows and the hairy scalp.

Frontal bone. } See *Frontis os.*
Frontal sinus. }

Fronta'lis. See *Occipitio frontalis.*

Fronta'lis ve'rus. See *Corrugator supercilii.*

FRO'NTIS OS. The frontal bone. *Os coronale. Os inverecundum. Metopon.* The external surface of this bone is smooth at its upper convex part, but below several cavities and processes are observed. At each angle of the orbits the bone jets out to form two internal and two external processes; and the ridge under the eyebrow on each side is called the superciliary process; from which the orbitar processes extend backwards, forming the upper part of the orbits; and between these the ethmoid bone is received. The nasal process is situated between the two internal angular processes. At the internal angular process is a cavity for the caruncula lachrymalis; and at the external, another for the pulley of the major oblique muscle. The foramina are three on each side; one in each superciliary ridge, through which a nerve, artery, and vein, pass to the integuments of the forehead; a second near the middle of the internal side of the orbit, called internal orbitar; the third is smaller and lies about an inch deeper in the orbit. On the inside of the os frontis there is a ridge which is hardly perceptible at the upper part, but grows more prominent at the bottom, where the foramen cæcum appears; to this ridge the falx is attached. The frontal sinus is placed over the orbit on each side, except at this part the frontal bone is of mean thickness between the parietal and occipital: but the orbitar process is so thin as to be almost transparent.

Fru'ctus horæ'i. See *Fruits, summer.*

FRUITS, SUMMER. *Fructus horæi.* Under this term physicians comprehend strawberries, cherries, currants, mulberries, raspberries, and the like. They possess a sweet sub-acid taste, and are exhibited as dietetic auxiliaries, as refrigerants, antiseptics, attenuants, and aperients. Formerly they were exhibited medicinally in the cure of putrid affections, and to promote the alvine and urinary excretions. Considering them as an article of diet, they afford little nourishment, and are liable to produce flatulencies. To persons of a bilious constitution and rigid fibres, and where the habit is disposed naturally, or from extrinsic causes, to an inflammatory or putrescent state, their moderate, and even plentiful use, is salubrious; by those of a cold inactive disposition, where the vessels are lax, the circulation languid, and the digestion weak, they should be used very sparingly. The juices extracted from these fruits by expression, contain their active qualities freed from their grosser indigestible matter. On standing, the juice ferments and changes to a vinous or acetous state. By proper addition of sugar, and by boiling, their fermentative power is suppressed, and their medicinal qualities preserved. The juices of these fruits, when purified from their fæculencies by settling and straining, may be made into syrups, with a due proportion of sugar in the usual way.

FRUMENTA'CEOUS. A term applied to all such plants as have a conformity with wheat, either with respect to their fruit, leaves, or ears.

FU'CUS. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Algæ.*

Fu'cus digita'tus. This fucus grows upon stones and rocks in the sea near the shore. It has several plain, long leaves or sinuses springing from a round stalk, in the manner of fingers when extended. It affords soda.

Fu'cus escule'ntus. Edible fucus. Mr. Hudson has made this a distinct species, but Linnæus included it under his saccharinus. It grows plentifully in the sea near the shores of Scotland, and also those of Cumberland. It has a broad, plain, simple, sword-shaped leaf, springing from a pinnated stalk.

Fu′cus helminthoco′rton. See *Corallina corsicana.*

Fu′cus palma′tus. Handed fucus. This grows in the sea and consists of a thin lobed leaf like a hand.

Fu′cus sacchari′nus. Sea-belts; so called from the supposed resemblance of its leaves to a belt or girdle. It grows upon rocks and stones by the sea-shore The leaves are very sweet, and when washed and hung up to dry, will exude a substance like sugar, from whence it was named.

Fu′cus vesiculo′sus. The systematic name of the sea oak. *Quercus marina.* The sea oak. Sea wreck. This sea-weed is the *Fucus vesiculosus fronde plana dichotoma costata integerrima, vesiculis axillaribus geminis, terminalibus tuberculatis,* of Linnæus. It is said to be a useful assistant to sea-water, in the cure of disorders of the glands. Burnt in the open air, and reduced to a black powder, it forms the æthiops vegetabilis, which, as an internal medicine, is similar to burnt sponge.

FULI′GO. (*Quasi fumiligo,* from *fumus,* smoke.) *Araxos. Asoper. Asuoli.* Soot. Wood soot, *fuligo ligni,* or the condensed smoke from burning wood, has a pungent, bitter, and nauseous taste, and is resolved by chemical analysis into a volatile alkaline salt, an empyreumatic oil, a fixed alkali, and an insipid earth. The tincture prepared from this substance, *tinctura fuliginis,* is recommended as a powerful antispasmodic in hysterical affections.

FULMINA′TION. A quick and lively explosion of bodies, such as takes place with fulminating gold, fulminating powder, and in the combustion of a mixture of inflammable gas and vital air.

FUMA′RIA. (From *fumus,* smoke, from its juice when dropped into the eye, producing the same sensations as smoke.)

1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.* Fumitory.

2. The pharmacopœial name of the common fumitory. See *Fumaria officinalis.*

Fuma′ria bulbo′sa. *Aristolochia fabacea.* The root of this plant, *Fumaria bulbosa caule simplici, bracteis longitudine florum,* of Linnæus, was formerly given to restore suppressed menses, and as an anthelmintic.

Fuma′ria officina′lis. The systematic name of the fumitory. *Fumaria. Fumus terræ. Capnos. Herba melancholifuga.* The leaves of this indigenous plant, *Fumaria officinalis pericarpiis monospermis racemosis, caule diffuso,* of Linnæus, are directed for medicinal use by the Edinburgh college; they are extremely succulent, and have no remarkable smell, but a bitter, somewhat saline taste. The infusion of the dried leaves, or the expressed juice of the fresh plant, is esteemed for its property of clearing the skin of many disorders of the leprous kind.

FUMIGA′TION. The application of fumes, either from metallic or other preparations to particular parts of the body, as those of the mercurial kind to venereal sores, &c.

Fumitory. See *Fumaria.*

Fu′mus a′lbus. Mercury.

Fu′mus ci′trinus. Sulphur.

Fu′mus du′plex. Sulphur and mercury.

Fu′mus ru′bens. Orpiment.

FUNCTION. See *Action.*

FU′NGUS. 1. Proud flesh. A term in surgery to express any luxuriant formation of flesh.

2. The name of an order of plants in the Linnæan system, belonging to the *Cryptogamia* class.

Fu′ngus ignia′rius. See *Boletus igniarius.*

Fu′ngus la′ricis. See *Boletus laricis.*

Fu′ngus melite′nsis. This is improperly called a fungus. See *Cynomorium.*

Fu′ngus rosa′ceus. See *Bedeguar.*

Fu′ngus sa′licis. The willow fungus. See *Boletus suaveolens.*

Fu′ngus sambu′cinus. See *Peziza Auricula.*

Fu′ngus vino′sus. The dark cobweb-like fungus, which vegetates in dry cellars, where wine, ale, and the like are kept.

FUNI′CULUS UMBILICA′LIS. (*Funiculus;* dim. of *funis,* a cord.) See *Umbilical cord.*

Fu′nis. A rope or cord.

FU′NIS UMBILICA′LIS. See *Umbilical cord.*

Furce′lla infe′rior. The ensiform cartilage.

Fu′rcula. The clavicle.

FU′RFUR. Bran. A disease of the skin, in which the cuticle keeps falling off in small scales like bran.

FURFURA′CEOUS. (*Furfuraceus,* from *furfur,* bran.) A term applied to the sediment deposited in the urine of persons afflicted with fever, of a reddish or whitish matter, which generally appears within an hour or two after the urine is passed, and only falls in part to the bottom, the urine remaining turbid.

FURNACE. *Furnus.* The furnaces employed in chemical operations are of three kinds: 1. The *evaporatory furnace,* which has received its name from its use; it is employed to reduce substances into vapour by means of heat, in order to separate the more fixed principles from those which are more volatile. 2. The *reverberatory furnace,* which name it has received from its construction, the flame being prevented from rising; it is appropriated to distillation. 3. The *forge furnace,* in which the current of air is determined by bellows.

Fu′ror uteri′nus. (From *furo,* to be mad, and *uterus,* the womb.) See *Nymphomania.*

FURU′NCULUS. (From *furo,* to rage;

so named from its heat and inflammation before it suppurates.) *Dothein* of Paracelsus. *Chiadus. Chioli.* A boil. An inflammation of a subcutaneous gland, known by an inflammatory tumour that does not exceed the size of a pigeon's egg.

FUSION. (*Fusio; from fundo*, to pour out.) A chemical process, by which bodies are made to pass from the solid to the fluid state, in consequence of the application of heat. The chief objects susceptible of this operation are salts, sulphur, and metals. Salts are liable to two kinds of fusion: the one, which is peculiar to saline matters, is owing to water contained in them, and is called *aqueous fusion;* the other, which arises from the heat alone, is known by the name of *igneous fusion.*

G.

GABIA′NUM O′LEUM. See *Petroleum rubrum.*

GABI′REA. A fatty kind of myrrh, mentioned by Dioscorides.

GALA′CTIA. (From γαλα, milk.) *Galactirrhœa.* An excess or overflowing of the milk.

GALA′CTINA. (From γαλα, milk.) Aliment prepared of milk.

GALACTIRRHŒ′A. (From γαλα, milk, and ρεω, to flow.) See *Galactia.*

GALACTO′DES. (From γαλα, milk.) In Hippocrates it signifies both milk warm and a milky colour.

GALACTO′PHORA MEDICAME′NTA. (From γαλα, milk, and φερω, to bring.) Medicines which increase the milk.

GALACTO′PHOROUS DUCTS. (*Galactophorus;* from γαλα, milk, and φερω, to carry, because they bring the milk to the nipple.) The excretory ducts of the glands of the breasts of women, which terminate in the papilla, or nipple, are so called.

GALACTOPOE′TICA. (From γαλα, milk, and ποιεω, to make.) Milk-making, an epithet applied to the faculty of making milk.

GALACTOPO′SIA. (From γαλα, milk, and πινω, to drink.) The method of curing diseases by a milk diet.

GALA′NGA. (Perhaps its Indian name.) See *Maranta* and *Kæmpferia.*

GALA′NGA MA′JOR. See *Kæmpferia Galanga.*

GALA′NGA MI′NOR. See *Maranta Galanga.*

Galangal. See *Galanga.*

Galangal, English. See *Cyperus.*

GALBANUM. (From *chalbanah*, Heb.) See *Bubon galbanum.*

GA′LBEI. *Galbeum.* A sort of ornamental and medical bracelets worn by the Romans.

GA′LBULUS. (From *galbus*, yellow.) When the skin of the body is naturally yellow.

GA′LDA GU′MMI. This is a gum-resin, mentioned by old writers, but totally forgot in the present day, and not to be obtained. Externally, it is of a brown colour, but white within, of a hard lamellated structure, and smells and tastes somewhat like elemi. When burnt it gives out an agreeable odour. It was formerly used as a warm, stimulating medicine, and applied in plasters as a strengthener.

GA′LEA. (From γαλη, a cat, of the skin of which it was formerly made.) A helmet. In anatomy, the amnios is so called, because it surrounds the fœtus like a helmet. In surgery, it is a bandage for the head. A species of head-ach is so called, when it surrounds the head like a helmet.

GALEANTHRO′PIA. (This term seems to be from γαλη, a cat, and ανθρωπος, a man.) It is a species of madness, in which a person imagines himself to be a cat, and imitates its manners.

GA′LEGA. (From γαλα, milk; so named because it increases the milk of animals which eat it.) The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

2. The pharmacopœial name of the *Ruta capraria.* See *Galega officinalis:*

GA′LEGA OFFICINA′LIS. The systematic name of the goats rue. *Galega. Ruta capraria.* Goats rue. From the little smell and taste of this plant, *Galega officinalis; leguminibus strictis, erectis; foliolis lanceolatis, striatis, nudis,* of Linnæus, it may be supposed to possess little virtues. In Italy, the leaves are eaten amongst salads.

GA′LEGÆ. A species of senna. The *cassia tora* of Linnæus.

GALENUS, CLAUDIUS, was born at Pergamus, in Asia Minor, in 131. His father, Nicon, having instructed him in the rudiments of knowledge, sent him to attend the best schools of philosophy. Galen soon displayed his judgment by selecting what appeared most rational from the different sects; but he totally rejected the Epicurean system, which was then in fashion. About the age of 17, he began his attachment to the science of medicine, over which he was destined to preside for many centuries with oracular authority. During his youth, he travelled much, that he might converse with the most intelligent physicians of the age, and inform himself concerning the drugs brought from other countries. He resided several years at Alexandria, which was then the great resort of men of science, and the best school of medicine in the world. At the age of 28, returning to his native place, he met with distinguished success in practice; but four years after he attempted to establish himself at Rome. Here he encountered much opposition from his professional brethren, who stigmatized him as a theorist, and even as a dealer in magic; and though he gained the esteem of several men of learning and rank, yet wanting temper and experience, sufficient to maintain a successful contest with a numerous and popular party, he was obliged to return to Pergamus within five years, under the pretence of avoiding the plague, which then raged at Rome. He was however soon after sent for to attend the Emperors Marcus Aurelius and Lucius Verus, of whom the latter died; and the former conceived so high an opinion of Galen, that subsequently during his German expedition, he committed his two sons to the care of that physician. These princes were seized with fevers, in which Galen having prognosticated a favourable issue, contrary to the opinion of all his colleagues, and having accordingly restored them to health, he attained an eminence of reputation, which enabled him to defy the power, and finally to ruin the credit, of his former opponents. It is not certain, whether he continued at Rome till his death, nor at what precise period this occurred; but Fabricius asserts that he attained the age of 70, which corresponds to the 7th year of Severus; and his writings appear to indicate, that he was still in that city in the early part of this emperor's reign. The greatest part of Galen's life was spent in the zealous pursuit of knowledge, and especially of every thing which might have the least connection with medicine; and he is said to have composed about 750 different essays on such subjects. He appears however to have been too much elated with the consciousness of his superior endowments, and to have behaved rather contemptuously towards his brethren; which may have inflamed their opposition to him. The chief object in his writings appears to be to illustrate those of Hippocrates, which he thought succeeding physicians had misunderstood or misrepresented: in this he has displayed great acuteness and learning, though he has not much increased the stock of practical information. His example too had the unfortunate effect of introducing a taste for minute distinctions and abstract speculations; while the diligent observation of nature, which distinguished the father of medicine, fell into neglect. We must therefore regret, that the splendour of Galen's talents so completely dazzled his successors, that, until about the middle of the 17th century, his opinions bore an almost undivided sway. Numerous editions of his works, in the original Greek, or translated into Latin, have been printed in modern times.

GALE′NA. (From γαλειν, to shine.) The name of an ore formed by the combination of lead with sulphur.

Gale′nic me′dicine. That practice of medicine which conforms to the rules of Galen, and runs much upon multiplying herbs and roots in the same composition, though seldom torturing them any otherwise than by decoction. It is opposed to chemical medicine, which, by the force of fire, and a great deal of art, fetches out the virtues of bodies, chiefly mineral, into a small compass.

Gale′nium. (From γαληνη, galena.) A cataplasm; in the composition of which was the galena. In Paulus Ægineta it is considered as anodyne.

Galeo′bdolon. (From γαλεη, *felis*, and βδολος, *crepitus*.) See *Galeopsis*.

Galeo′psis. (From καλος, good, and οψις, vision; so called because it was thought good for the sight; or from γαλη, a cat, and οψις, aspect; the flowers gaping like the open mouth of that animal.) *Galeobdolon. Lamium rubrum. Urtica iners magna fœtidissima. Stachys fœtida.* Hedge nettle. See *Lamium album*.

Galeri′culum aponeuro′ticum. The tendinous expansion which lies over the pericranium.

GA′LIUM. (From γαλα, milk; some species having the property of coagulating milk.) 1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Monogynia*.

2. The pharmacopœial name of the herb cheese rennet, or ladies bedstraw. See *Galium verum*.

3. A name for madder.

Ga′lium a′lbum. The greater ladies bedstraw. See *Galium mollugo*.

Ga′lium apari′ne. The systematic name of the goose-grass. *Aparine. Philanthropus. Ampelocarpus. Omphalocarpus. Ixus. Asparine. Asperula.* Goose-grass and cleaver's bees. Cleavers. Goose-share. Hayriff. This plant, which is common in our hedges and ditches, is the *Galium aparine, foliis octonis lanceolatis carinatis scabris retrorsum aculeatis, geniculis venosis, fructu hispido*, of Linnæus. The expressed juice has been given with advantage as an aperient and diuretic in incipient dropsies; but the character in which it has of late been chiefly noticed, is that of a remedy against cancer. A tea-cup full, internally, gradually increased to half a pint, two or three times a day, and the herb applied, in cataplasm, externally, has been said to cure cancers. Such beneficial results are not confirmed by the experience of others.

Ga'lium mollu'go. The systematic name of the greater ladies bedstraw. *Galium album.* This herb, *Galium; foliis octonis, ovato-linearibus, subserratis, patentissimis, mucronatis; caule flaccido, ramis patentibus,* with its flowers, are used medicinally. Five ounces, or more, of the expressed juice, taken every evening upon an empty stomach, is said to cure epilepsy.

Ga'lium ve'rum. The systematic name of the true ladies bedstraw, or cheese-rennet. *Galium.* The tops of this plant, *Galium verum; foliis octonis, linearibus, sulcatis; ramis floriferis, brevibus,* of Linnæus, were long used as an efficacious medicine in the cure of epilepsy, but, in the practice of the present day, they are abandoned. Indeed, from the sensible qualities of the plant, little can be expected. The leaves and flowers possess the property of curdling milk; it is on that account styled cheese-rennet.

Gall. See *Bile.*

GALL SICKNESS. A popular name for the remitting fever occasioned by marsh miasmata, in the Netherlands, and which proved so fatal to thousands of the English soldiers after the capture of Walcheren in the year 1809. Dr. Lind informs us, that at Middleburgh, the capital of Walcheren, a sickness generally reigns towards the latter end of August or the beginning of September, which is always most violent after hot summers. It commences after the rains which fall in the end of July; the sooner it begins the longer it continues, and it is only checked by the coldness of the weather. Towards the end of August and the beginning of September, it is a continual burning fever, attended with a vomiting of bile, which is the *gall sickness.* This fever, after continuing three or four days, intermits, and assumes the form of a double tertian; leaving the patient in a fortnight, or perhaps sooner. Strangers, that have been accustomed to breathe a dry, pure air, do not recover so quickly. Foreigners in indigent circumstances, such as the Scots and German soldiers, who were garrisoned in the adjacent places, were apt, after those fevers, to have a swelling in the legs, and a dropsy; of which many died.

These diseases are the same with the double tertians common within the tropics. Such as are seized with the gall sickness, have at first some flushes of heat over the body, a loss of appetite, a white, foul tongue, a yellow tinge in the eyes, and a pale colour of the lips. Such as live well, drink wine, and have warm clothes, and a good lodging, do not suffer so much during the sickly season as the poor people; however, these diseases are not infectious, and seldom prove mortal to the natives.

Sir John Pringle observes, that the prevailing epidemic of autumn, in all marshy countries, is a fever of an intermitting nature, commonly of a tertian form, but of a bad kind; which, in the dampest places and worst seasons, appears as a double tertian, a remitting, or even an ardent fever. But, however these may vary in their appearance, according to the constitution of the patient and other circumstances, they are all of a similar nature. For though, in the beginning of the epidemic, when the heat, or rather the putrefaction in the air, is the greatest, they assume a continued or a remitting form; yet, by the end of autumn, they usually terminate in regular intermittents.

But although, in the gall sickness, there is both a redundance and a depravation of the bile, still the disease cannot, with justice, be said to originate wholly from that cause. It is certain, however, that the disease may be continued, and the symptoms aggravated, by an increased secretion and putrefaction of the bile, occasioned by the fever. In proportion to the coolness of the season, or the height and dryness of the ground, this disease is milder, remits and intermits more freely, and removes further from the nature of a continued fever. The higher ranks of people in general are the least liable to the diseases of the marshes; for such countries require dry houses, apartments raised above the ground, moderate exercise, without labour, in the sun, or evening damps; a just quantity of fermented liquors, plenty of vegetables and fresh meats. Without such helps, not only strangers but the natives themselves are sickly, especially after hot and close summers. The hardiest constitutions are very little excepted more than others; and hence the British in the Netherlands have always been subject to fevers.

By this disease, the British troops were harrassed throughout the war, from 1743 to 1747. It appeared in the month of August, 1743: the paroxysms came on in the evening, with great heat, thirst, a violent headach, and often a delirium. These symptoms lasted most of the night, but abated in the morning, with an imperfect sweat; sometimes with an hæmorrhage of the nose, or looseness. The stomach, from the beginning, was disordered with a nausea and sense of oppression; frequently with a bilious and offensive vomiting. If evacuations were either neglected or too sparingly used, the patient fell into a continued fever, and sometimes grew yellow, as in jaundice. When the season was further advanced, this fever was attended with a cough, rheumatic pains, and sizy blood. The officers, being better accommodated than the common men, and the cavalry, who had cloaks to keep them warm, were not so subject to it; and others who belonged to the army, but lay in quarters, were least of all affected;

and the less in proportion to their being exposed to heats, night damps, and the other fatigues of the service. In this manner did the remitting fever infest the army for the remaining years of the war: and that exactly in proportion to their distance from the marshy places, of which we have several notable instances in Pringle's observations.

GA'LLA. (From *Gallus*, a river in Bithynia.) See *Quercus cerris.*

GA'LLA TU'RCICA. See *Quercus cerris.*

GALL-BLADDER. *Vesicula fellis.* An oblong membranous receptacle, situated under the liver, to which it is attached in the right hypochondrium. It is composed of three membranes: a common, fibrous, and villous. Its use is to retain the bile which regurgitates from the hepatic duct, there to become thicker, more acrid, and bitter, and to send it through the cystic duct, which proceeds from its neck into the ductus communis choledochus, to be sent on to the duodenum.

GALL-STONES. Biliary concretions. Hard concrete bodies, of which there are great varieties, formed in the gall-bladder of animal bodies. Gall-stones often lie quiet; so that, until dissection after death, some are never known to exist; but when they are prevented from passing through the gall ducts, they obstruct the passage of the bile into the intestines, and produce also many inconvenient symptoms, particularly the jaundice.

The diagnostics of this disorder are generally very obscure and uncertain: for other causes produce the same kind of symptoms as those which occur in this disease. The usual symptoms are a loss of appetite, a sense of fulness in the stomach, sickness and vomiting, languor, inactivity, sleepiness; and, if the obstruction continues for a time, there is wasting of the flesh; yellowness of the eyes, skin, and urine; whitish stools; a pain in the pit of the stomach; whilst the pulse remains in its natural state. The pain excited by an obstruction of the gall ducts, in consequence of gall-stones passing through them, and this not affecting the pulse, is considered as the leading pathognomonic symptom. This pain, in some, is extremely acute, in others there is only a slight uneasiness felt about the region of the liver; but its particular seat is the gall duct, just where it enters the duodenum. In some patients there is no yellowness of the skin; in others it exists for several months. There is no disease more painful than this, in some instances; it is as frequent as any other affection of the liver; it admits of much relief from medicine, and is not immediately dangerous to the patient. See *Icterus.*

GA'LLIC ACID. A peculiar acid which is extracted from the nut-gall that grows on the oak. This acid is also found, in a greater or less quantity, in all astringent vegetable substances.

GALLI'TRICHIS. Corrupted from *callitrichis*, or *callitrichum.*

GA'LLICUS MO'RBUS. The French disease. See *Lues venerea.*

GALLINA'GO. (Diminutive of *gallus*, a cock.) 1. The woodcock.

2. An eminence within the prostate gland is called caput gallinaginis, from its fancied resemblance to a woodcock's head.

GA'LLIUM. See *Galium.*

GA'LVANISM. A professor of anatomy, in the university of Bologna, named *Galvani*, was one day making experiments on electricity in his elaboratory: near the machine were some frogs that had been flayed, the limbs of which became convulsed every time a spark was drawn from the apparatus. Galvani, surprised at this phenomenon, made it a subject of investigation, and discovered that metals, applied to the nerves and muscles of these animals, occasioned powerful and sudden contractions, when disposed in a certain manner. He gave the name of animal electricity to this order of new phenomena, from the analogy that he considered existing between these effects and those produced by electricity.

The name animal electricity has been superseded, notwithstanding the great analogy that exists between the effects of electricity and those of Galvanism, in favour of the latter term; which is not only more applicable to the generality of the phenomena, but likewise serves to perpetuate the memory of the discoverer.

In order to give rise to Galvanic effects in animal bodies, it is necessary to establish a communication between two points of one series of nervous and muscular organs. In this manner a circle is formed, one arch of which consists of the animal parts, rendered the subject of experiment, while the other arch is composed of excitatory instruments, which generally consist of several pieces, some placed under the animal parts called supporters, others destined to establish a communication between the latter, are called conductors. To form a complete Galvanic circle, take the thigh of a frog, deprived of its skin; detach the crural nerve, as far as the knee; put it on a piece of zinc; put the muscles of the leg on a piece of silver; then finish the excitatory arch, and complete the Galvanic circle by establishing a communication by means of the two supporters; by means of iron or copper wire, pewter, or lead. The instant that the communicators touch the two supporters, a part of the animal arch formed by the two supporters will be convulsed. Although this disposition of the animal parts, and of Galvanic instruments, be most favourable to the development of the phenomena, yet the composition of the animal and excitatory arch may be much varied. Thus contractions are obtained, by placing the two supporters under the nerve, and leaving the muscle out of the circle, which proves that nerves essentially constitute the animal arch.

It is not necessary for nerves to be entire in order to produce contractions. They take place whether the organs be tied or cut through, provided there exists a simple contiguity between the divided ends. This proves that we cannot strictly conclude what happens in muscular action, from that which takes place in Galvanic phenomena; since, if a nerve be tied or divided, the muscles on which this is distributed lose the power of action.

The cuticle is an obstacle to Galvanic effects; they are always feebly manifested in parts covered by it. When it is moist, fine, and delicate, the effect is not entirely interrupted. Humboldt, after having detached the cuticle from the posterior part of the neck and back, by means of two blisters, applied plates of metal to the bare cutis, and, at the moment of establishing a communication, he experienced sharp prickings, accompanied with a sero-sanguinous discharge.

If a plate of zinc be placed under the tongue, and a flat piece of silver on its superior surface, on making them touch each other, an acerb taste will be perceived, accompanied with a slight trembling.

The excitatory arch may be constructed with three, two, or even one metal only, with alloys, amalgams, or other metallic or mineral combinations, carbonated substances, &c. It is observed that metals which are in general the most powerful excitors, induce contractions so much the more as they have an extent of surface. Metals are all more or less excitants; and it is observed that zinc, gold, silver, pewter, are of the highest rank; then copper, lead, nickel, antimony, &c.

Galvanic susceptibility, like muscular irritability, is exhausted by too long continued exercise, and is recruited by repose. Immersion of nerves and muscles in alkohol and opiate solutions diminishes and even destroys this susceptibility, in the same manner, doubtless, as the immoderate use of these substances in the living man blunts, and induces paralysis in muscular action. Immersion in oxymuriatic acid restores the fatigued parts, to be again acted on by the stimulus. Animals killed by the repeated discharge of an electric battery, acquire an increase of Galvanic susceptibility; and this property subsists unchanged in animals destroyed by submersion in mercury, pure hydrogen gas, azote, and ammonia; and finally, it is totally annihilated in animals suffocated by the vapour of charcoal.

Galvanic susceptibility is extinct in the muscles of animals of warm blood, in proportion as vital heat is dissipated; sometimes even when life is terminated in convulsions, contractility cannot be put into action, although warmth be not completely gone, as though the vital property were consumed by the convulsion, amidst which the animals had expired. In those of cold blood, on the contrary, it is more durable. The thighs of frogs, long after being separated from every thing, and even to the instant of incipient putrefaction, are influenced by Galvanic stimuli; doubtless, because irritability, in these animals, is less intimately connected with respiration, and life more divided among the different organs, which have less occasion to act on each other for the execution of its phenomena. The Galvanic chain does not produce sensible actions (that is, contractions,) until the moment it is completed, by establishing a communication with the parts constituting it. During the time it is complete, that is, throughout the whole space of time that the communication remains established, every thing remains tranquil; nevertheless, Galvanic influence is not suspended: in fact, excitability is evidently increased, or diminished, in muscles that have been long continued in the Galvanic chain, according to the difference of the reciprocal situation of the connecting metals.

If silver has been applied to nerves, and zinc to muscles, the irritability of the latter increases in proportion to the time they have remained in the chain. By this method, the thighs of frogs have been revivified in some degree, and afterwards became sensible to stimuli, that before had ceased to act on them. By distributing the metals in an inverse manner, applying zinc to nerves and silver to muscles, an effect absolutely contrary is observed; and the muscles that possessed the most lively irritability when placed in the chain, seem to be rendered entirely paralytic if they remain long in this situation.

This difference evidently depends on the direction of the Galvanic fluid, determined towards the muscles or nerves, according to the manner in which these metals are disposed, and this is of some importance to be known for the application of Galvanic means to the cure of diseases.

Galvanic Pile.

M. Volta's apparatus is as follows: —

Raise a pile, by placing a plate of zinc, a flat piece of wet card, and a plate of silver, successively; then a second piece of zinc, &c. until the elevation is several feet high; for the effects are greater in proportion to its height; then touch both extremities of the pile, at the same instant, with one piece of iron wire; at the moment of contact, a spark is excited from the extremities of the pile, and luminous points are often perceived at different heights, where the zinc and silver come into mutual contact. The zinc end of this pile appears to be negatively electrified; that formed by the silver, on the contrary, indicates marks of positive electricity.

If we touch both extremities of the pile, after having dipped our hands into water, or, what is better, a saline solution, a commotion, followed by a disagreeable pricking in the fingers and elbow, is felt.

If we place in a tube filled with water, and hermetically closed by two corks, the extremities of two wires of the same metal which are in contact at the other extremity, one with the summit, the other with the base of the pile; these ends, even when separated only by the space of a few lines, experience evident changes at the instant the extremities of the pile are touched; the wire in contact with that part of the pile composed of silver becomes overed with bullæ of hydrogen gas; that which touches the extremity formed by zinc, becomes oxidized, or gives off oxygen gas. Fourcroy attributes this phenomenon to the decomposition of water by the Galvanic fluid, which abandons the oxygen to the metal that touches the positive extremity of the pile; then conducts the other gas invisibly to the end of the other wire, there to be disengaged.

Galvanic Trough.

This is a much more convenient apparatus. Plates of two metals, commonly zinc and copper, are fastened together, and cemented into a wooden trough, so as to form a number of cells; or earthen-ware troughs with partitions being procured, the metals, connected by a slip, are suspended over these, so that in each cell, except at the ends, there is a plate of each metal; then a diluted acid, (usually the sulphuric, nitric, or muriatic, mixed with from twelve to twenty parts of water,) is poured into the trough. It is necessary that the metals be placed in the same order throughout, or one series will counteract another. The zinc end becomes negative, the copper positive; and the power is in proportion to the number of the series; and several such troughs may be connected together, so as to form a most powerful apparatus.

From the numerous experiments of Davy, many new and important facts have been established, and Galvanism has been found one of the most powerful agents in chemistry: by its influence, platina wire has been melted; gold, silver, copper, and most of the metals, have easily been burnt! the fixed alkalies, and many of the earths have been made to appear as consisting of a metallic base, and oxygen; compound substances, which were before extremely difficult to decompose, are now, by the aid of Galvanism, easily resolved into their constituents.

Gama′ndra. See *Stalagmitis.*

Gambie′nse gu′mmi. See *Kino.*

Gamboge. See *Stalagmitis.*

Gambo′gia. See *Cambogia* and *Stalagmitis.*

Gambo′gium. }
Gamboi′dea. } See *Stalagmitis.*

Ga′mma. (From the letter Γ, *gamma*, which it resembles.) A surgical instrument for cauterising a hernia.

Gamphe′le. (From γαμψος, crooked.) The cheek. The jaw.

Ga′ngamon. (From γαγγαμη, a fishing-net, which it was said to resemble.) A name of the omentum. Some call the contexture of nerves about the navel by this name.

GA′NGLION. (γαγγλιον, a knot.) A knot.

1. In anatomy it is applied to a natural knot-like enlargement, in the course of a nerve.

2. In surgery it is an encysted tumour, formed in the sheath of a tendon, and containing a fluid like the white of an egg. It most frequently occurs on the back of the hand or foot.

GA′NGRENE. (γαγγραινα, from γραω, to feed upon.) *Gangrena.* An incipient mortification, so named from its eating away the flesh. Authors have generally distinguished mortification into two stages; the first, or incipient one, they name gangrene, which is attended with a sudden diminution of pain in the place affected; a livid discolouration of the part, which, from being yellowish, becomes of a greenish hue; a detachment of the cuticle, under which a turbid fluid is effused; lastly, the swelling, tension, and hardness, of the previous inflammation subside, and, on touching the part, a crepitus is perceptible, owing to the generation of air in the gangrenous parts.

Such is the state to which the term *gangrene* is applied. When the part has become quite cold, black, fibrous, incapable of moving, and destitute of all feeling, circulation, and life; this is the second stage of mortification, termed *sphacelus.* Gangrene, however, is frequently used synonymously with the word mortification. See *Mortification.*

Ga′rab. An Arabic name for the disorder called *Ægylops.*

GARCI′NIA. (So called in honour of Dr. Garcin, who accurately described it.) The name of a genus of plants in the Linnæan system. Class, *Dodecandria.* Order, *Monogynia.*

Garci′nia mangostana. The systematic name of the mangosteen tree. The mangosteen is a fruit about the size of an orange, which grows in great abundance on the tree called *Garcinia mangostana* by Linnæus, in Java and the Molucca islands. According to the concurring testimonies of all travellers, it is the most exquisitely flavoured, and the most salubrious of all fruits, it being such a delicious mixture of the tart and sweet. The flesh is juicy, white, almost transparent, and of a more delicate and agreeable flavour than the richest grape. It is eaten in almost every disorder, and the dried bark is used medicinally in dysenteries and tenesmus, and a strong decoction of it is much esteemed as a gargle in ulcerated sore throats.

Ga'rgale. (γαργαλη.) *Gargalos. Gargalismos.* Irritation, or stimulation.

Garga'reon. (Hebrew.) The uvula, or glandulous body, which hangs down into the throat.

GA'RGARISM. *Gargarismus.* A wash for the mouth and throat.

GARGARI'SMA. (From γαργαριζω, to gargle.) A gargle.

GARGARI'SMUM. A gargle or wash for the throat.

Ga'rgathum. A bed on which lunatics, &c. were formerly confined.

Gargle. See *Gargarisma.*

Garlic. See *Allium.*

GARNET, Thomas, was born in 1766, at Casterton in Westmoreland. After serving his time to a surgeon and apothecary, he went to study at Edinburgh, where he took his degree at twenty-two, and then attended the London hospitals for two years. In 1790 he settled at Bradford, and began to give private lectures on Philosophy and Chemistry; and here he wrote his Treatise on the Horley Green Spa. But in the following year he removed to Knaresborough, and soon after published an Analysis of the different Waters of Harrowgate, which place he visited during the summer season. About this period he formed the design of going to America; but while waiting to take his passage at Liverpool, he was solicited to deliver some lectures there, which were so favourably received, that he was induced to repeat his course at various other places; and at length the professorship at Anderson's Institution in Glasgow was offered him, where he began lecturing in 1796. Two years after he made a tour to the Highlands, of which he subsequently published an account. On the formation of the Royal Institution in London, he was invited by Count Rumford to become the lecturer there; he accepted the appointment, and the room was crowded with persons of the first distinction and fashion. He then turned his thoughts more seriously to the practice of his profession as likely to afford the most permanent support; but his prospects were cut short by death about the middle of the year 1802. A posthumous volume, entitled "Zoonomia," was published for the benefit of his family.

Garou bark. See *Daphne gnidium.*

Ga'ron. (γαρον.) A kind of pickle prepared of fish; at first it was made from a fish which the Greeks call *Garos;* but the best was made from mackarels. Among the moderns, *garum* signifies the liquor in which fish is pickled.

Garroti'llo. (From *garottar,* to bind closely. Span.) A name of the cynanche maligna, from its sense of strangulation, as if the throat were bound with a cord.

Garrophy'llus. See *Eugenia caryophyllata.*

GAS. (From *gascht,* a German word which means an eruption of wind.) See *Gaz.*

GA'STRIC A'RTERY. *Arteria gastrica.* The right or greater gastric artery, is a branch of the hepatic; the left, or lesser, a branch of the splenic.

GA'STRIC JUICE. *Succus gastricus.* A fluid separated by the capillary exhaling arteries of the stomach, which open upon its internal surface. The œsophagus also affords a small quantity, especially in the inferior part. Modern philosophers have paid great attention to this fluid, and from their several experiments it is known to possess the following properties:—It is the principal agent of digestion, and changes the aliments into a kind of uniform soft paste: it acts on the stomach after the death of the animal. Its effects shew that it is a solvent, but of that peculiar nature that it dissolves animal and vegetable substances uniformly, and without exhibiting a stronger affinity for the one than for the other. Although it is the most powerful agent of digestion in the stomach, its dissolvent power has need of assistance from the action of several secondary causes; as heat, which seems to augment and concentrate itself in the epigastric region; and so long as the exertion of the stomach continues, there is a sort of intestine fermentation, (which should not, however, in its full sense, be compared to the motion by which fermentative and putrescent substances are decomposed); there is also a moderate and peristaltic motion of the muscular fibres of the stomach, which press the aliment on all sides, and perform a slight trituration, while the gastric moisture softens and macerates the food before it is dissolved. By many it has been considered merely as a ferment, but this cannot be the case. See *Digestion.*

It is one of the most powerful antiseptics with which we are acquainted; and, from the experiments of *Spallanzani, Scopoli, Carminati,* and others, its nature appears to be essentially different in the several classes of animals, as they have proved by analysis. The gastric juice of the human subject, when healthy, is inodorous, of a saltish taste, and limpid, like water, unless it be a little tinged with the yellow colour of some bile, that has regurgitated into the stomach. In quantity it is very considerable, as must be evident from the extent of the surface of the stomach, and its continual secretion; but it is most copious when solicited by the stimulus of food. Besides the properties of this fluid before mentioned, it has others which have induced physicians and surgeons to exhibit it medicinally. It cures dyspepsia and intermittent fever. Applied externally, in form of fomentation or poultice, it cures putrid and scrofulous ulcers in a wonderful manner; and it is to be regretted that its utility is not more generally known.

Gastrinum. Potash.

GASTRI'TIS. (From γαςηρ, the stomach.) Inflammation of the stomach. A genus of disease in the class *pyrexiæ*, and order *phlegmasiæ* of Cullen. It is known by pyrexia, anxiety, heat, and pain in the epigastrium, increased when any thing is taken into the stomach, vomiting, hiccup, pulse small and hard, and prostration of strength. There are two species: 1. *Gastritis phlegmonodea*, with acute pain and severe fever. 2. *Gastritis erythematica*, when the pain and fever are slighter, with an erysipelatous redness appearing in the fauces.

Gastritis is produced by acrid substances of various kinds, such as arsenic, corrosive sublimate, &c. taken into the stomach, as likewise by food of an improper nature; by taking large draughts of any cold liquor when the body is much heated by exercise, or dancing; and by repelled exanthemata and gout. Besides these, it may arise from an inflammation of some of the neighbouring parts being communicated to the stomach.

The erysipelatous gastritis arises chiefly towards the close of other diseases, marking the certain approach to dissolution, and being unaccompanied with any marks of general inflammation, or by any burning pain in the stomach.

The symptoms of phlegmonous gastritis, as observed above, are a violent burning pain in the stomach, with great soreness, distention, and flatulency; a severe vomiting, especially after any thing is swallowed, whether it be liquid or solid; most distressing thirst; restlessness, anxiety, and a continual tossing of the body, with great debility, constant watching, and a frequent, hard, and contracted pulse. In some cases, a severe purging attends.

If the disease increases in violence, symptoms of irritation then ensue; there is a great loss of strength, with faintings; a short and interrupted respiration; cold, clammy sweats, hiccups, coldness of the extremities, an intermittent pulse, and the patient is soon cut off.

The event of gastritis is seldom favourable, as the person is usually either suddenly destroyed by the violence of the inflammation, or else it terminates in suppution, ulceration, or gangrene.

If the symptoms are very mild, and proper remedies have been employed at an early period of the disease, it may, however, terminate in resolution, and that in the course of the first, or, at farthest, the second week.

Its termination in suppuration may be known by the symptoms, although moderate, exceeding the continuance of this period, and a remission of pain occurring, whilst a sense of weight and anxiety still remain; and, on the formation of an abscess, cold shiverings ensue, with marked exacerbations in the evening, which are followed by night sweats, and other symptoms of hectic fever; and these at length prove fatal, unless the pus is thrown up by vomiting, and the ulcer heals.

Its tendency to gangrene may be dreaded, from the violence of its symptoms not yielding to proper remedies early in the disease; and, when begun, it may be known by the sudden cessation of the pain; by the pulse continuing its frequency, but becoming weaker, and by delirium, with other marks of increasing debility ensuing.

Fatal cases of this disease shew, on dissection, a considerable redness of the inner coat of the stomach, having a layer of coagulable lymph lining its surface. They likewise shew a partial thickening of the substance of the organ, at the inflamed part, the inflammation seldom extending over the whole of it. Where ulceration has taken place, the ulcers sometimes are found to penetrate through all its coats, and sometimes only through one or two of them.

The cure is to be attempted by copious and repeated bleedings, employed at an early period of the disease, not regarding the smallness of the pulse, as it usually becomes softer and fuller after the operation: also several leeches should be applied to the epigastrium, followed by fomentations, or the hot bath; after which a large blister will be proper. The large intestines may be in some measure evacuated by a laxative clyster; but scarcely any internal medicine can be borne by the stomach, till the violence of the disease is much abated; we may then try magnesia, or other mild cathartic, to clear out the canal effectually. Where acrid substances have been taken, mucilaginous drinks may be freely exhibited, to assist their evacuation and sheath the stomach; otherwise only in small quantity: and, in the former case, according to the nature of the poison, other chemical remedies may come in aid, but ought never to be too much relied upon. Should suppuration occur, little can be done beyond avoiding irritation, and supporting strength by a mild farinaceous diet, and giving opium occasionally to relieve pain.

GASTROCE'LE. (From γαςηρ, the stomach, and κηλη, a tumour.) A hernia of the stomach, occasioned by a protrusion of that viscus through the abdominal parietes.

GASTROCNE'MIUS. (From γαςηρ, the stomach, and κνημη, the leg.) The name of the muscles which form the calf or belly of the leg.

GASTROCNE'MIUS EXTE'RNUS. *Gemellus.* This muscle, which is situated immediately under the integuments at the back part of the leg, is sometimes called *gemellus:* this latter name is adopted by Albinus. Winslow describes it as two muscles, which he calls *gastrocnemii;* and Douglas considers this and the following as a *quadriceps*, or muscle with four heads, to which he gives the name of *extensor tarsi suralis.* It is called *bi femoro calcanien* by Dumas. The gastrocnemius externus arises by two distinct heads. The first, which is the thickest and longest of the two, springs by a strong thick tendon from the upper and back part of the inner condyle of the os femoris, adhering strongly to the capsular ligament of the joint, between which and the tendon is a considerable *bursa mucosa.* The second head arises by a thinner and shorter tendon from the back part of the outer condyle of the os femoris. A little below the joint, their fleshy bellies unite in a middle tendon, and below the middle of the tibia they cease to be fleshy, and terminate in a broad tendon, which, a little above the lower extremity of the tibia, unites with that of the gastrocnemius internus, to form one great round tendon, sometimes called *chorda magna*, but more commonly *tendo Achillis.*

GASTROCNE′MIUS INTE′RNUS. *Tibio peronei calcanien* of Dumas. This, which is situated immediately under the last described muscle, is sometimes named *soleus*, on account of its shape, which resembles that of the sole-fish. It arises by two heads. The first springs by tendinous and fleshy fibres from the posterior part of the head of the fibula, and for some way below it. The second arises from an oblique ridge at the upper and posterior part of the tibia, which affords origin to the inferior edge of the popliteus, continuing to receive fleshy fibres from the inner edge of the tibia for some way down. This muscle, which is narrow at its origin, spreads wider, as it descends, as far as its middle; after which it becomes narrower again, and begins to grow tendinous, but its fleshy fibres do not entirely disappear till it has almost reached the extremity of the tibia, a little above which it unites with the last-described muscle, to form the *tendo Achillis.* This thick round chord is inserted into the lower and posterior part of the os calcis, after sliding over a cartilaginous surface on that bone, to which it is connected by a tendinous sheath that is furnished with a large *bursa mucosa.*

Both the gastrocnemii have the same use, viz. that of extending the foot, by drawing it backwards and downwards.

GASTROCO′LICUS. (From γαστηρ, the stomach, and κωλον, the colon.) A term applied to a vein which proceeds from the stomach to the colon.

GASTRODY′NIA. (From γαστηρ, the stomach, and οδυνη, pain.) Pain in the stomach.

GASTRO-EPIPLOIC ARTERY. *Arteria gastrico-epiploica.* The branch of the greater gastric artery that runs to the epiploon.

GASTRORAPHY. (*Gastroraphe;* from γαστηρ, the stomach, and ραφη, a suture.) The sewing of wounds of the abdomen.

GASTROTO′MIA. (From γαστηρ, the belly, and τεμνω, to cut.) The operation of cutting open the belly and uterus, as in the Cæsarian operation.

GAU′BIUS, JEROME DAVID, a celebrated Dutch physician, was a pupil of the illustrious Boerhaave at Leyden, where he graduated in 1725; and about ten years after he became professor there, and taught with great applause for a period of forty years. His reputation was extended all over Europe by several valuable publications, particularly by his "Institutiones Pathologiæ Medicinalis," and his "Adversaria;" which contributed not a little to the improvement both of the theory and practice of medicine. In another work he treated ably of the medical regulation of the mind: and he printed also a very elegant little book "De Methodo concinnandi formulas Medicamentorum." He died in 1780, in the seventy-sixth year of his age.

Gaule. See *Myrica galé.*

GAZ. (From *Gascht*, German, an eruption of wind.) *Gas.* Elastic fluid. Aëriform fluid. By the word *gaz*, we denote a permanently elastic aëriform fluid, or substance which has the appearance of air; that is to say, it is transparent, elastic, ponderable, invisible, (oxymuriatic acid gas, and a few others excepted,) and not condensible into a liquid or solid state by any degree of cold hitherto known: which distinguishes it from a vapour.

Some of the gases exist in nature without the aid of art, and may therefore be collected; others on the contrary, are only producible by artificial means.

All gases are combinations of certain substances, reduced to the gazeous form by the addition of caloric. It is, therefore, necessary to distinguish in every gas, the matter of heat which acted the part of a solvent, and the substance which forms the basis of the gas.

Gases are not contained in those substances from which we obtain them in the state of gas, but owe their formation to the expansive property of caloric.

Formation of Gases.

The different forms under which bodies appear, depend upon a certain quantity of caloric, chemically combined with them. The very formation of gases corroborates this truth. Their production totally depends upon the combination of the particular substances with caloric; and though called permanently elastic, they are only so because we cannot so far reduce their temperature, as to dispose them to part with it; otherwise they would undoubtedly become fluid or solid.

Water, for instance, is a solid substance in all degrees below 32° of Fahrenheit's scale; above this temperature it combines with caloric, and becomes a fluid. It retains its liquid state under the ordinary pressure of the atmosphere, till its temperature is augmented to 212°. It then combines with a larger portion of caloric, and is converted, *apparently*, into gas, or at least into elastic vapour; in which state it would continue, if the temperature of our atmosphere was above 212°. Gases are therefore solid substances, between the particles of which a repulsion is established by the quantity of caloric.

But as in the gazeous water, or steam, the caloric is retained with but little force, on account of its quitting the water when the vapour is merely exposed to a lower temperature, we do not admit steam amongst the class of gases, or permanently elastic aëriform fluids. In gases, caloric is united by a very forcible affinity, and no diminution of temperature, or increase of pressure, that has ever yet been effected, can separate it from them. Thus the air of our atmosphere, in the most intense cold, or when very strongly compressed, still remains in the aëriform state; and hence is derived the essential character of gases, namely, *that they shall remain aëriform, under all variations of pressure and temperature.*

In the modern nomenclature, the name of every substance existing in the aëriform state, is derived from its supposed solid base; and the term gas is used to denote its existence in this state.

In order to illustrate the formation of gases, or to shew in what manner caloric is combined with them, the following experiment may serve. Put into a retort, capable of holding half a pint of water, two ounces of muriate of soda, (common salt); pour on it half its weight of sulphuric acid, and apply the heat of a lamp; a great quantity of gas is produced, which might be collected and retained over mercury. But to serve the purpose of this experiment, let it pass through a glass receiver, having two openings, into one of which the neck of the retort passes, whilst, from the other, a bent tube proceeds, which ends in a vessel of water. Before closing the apparatus, let a thermometer be included in the receiver, to shew the temperature of the gas. It will be found that the mercury in the thermometer will rise only a few degrees; whereas the water in the vessel which receives the bent tube, will soon become boiling hot.

Explanation.—Common salt consists of muriatic acid, united to soda; on presenting sulphuric acid to this union, a decomposition takes place, especially when assisted by heat. The sulphuric acid unites by virtue of its greater affinity to the soda, and forms sulphate of soda, or Glauber's salt; the muriatic acid becomes therefore disengaged, and takes the gazeous form in which it is capable of existing at the common temperature. To trace the caloric during this experiment, as was our object, we must remark, that it first flows from the lamp to the disengaged muriatic acid, and converts it into gas; but the heat thus expended is chemically united, and therefore not appreciable by the thermometer. The caloric, however, is again evolved, when the muriatic acid gas is condensed by the water, with which it forms liquid muriatic acid.

In this experiment we therefore trace caloric in a chemical combination producing gas; and from this union we again trace it in the condensation of the gas, producing sensible heat.

Such, in general, is the cause of the formation and fixation of gases. It may be further observed, that each of these fluids loses or suffers the disengagement of different quantities of heat, as it becomes more or less solid in its new combination, or as that combination is capable of retaining more or less specific heat.

The discovery of aëriform gazeous fluids has occasioned the necessity of some peculiar instruments, by means of which those substances may be conveniently collected and submitted to examination. The principal ones for that purpose are styled the *pneumatic apparatus.*

The Pneumatic Reservoir, or Cistern,

Is made either of wood or strong sheet-iron, tinned, japanned, or painted. A trough of about two feet long, sixteen inches wide, and fifteen high, has been found to be sufficient for most experiments. Two or three inches below its brim, a horizontal shelf is fastened, in dimension about half or one-third part of the width of the trough. In this shelf are several holes: these holes must be made in the centre of a small excavation, shaped like a funnel, which is formed in the lower part of the shelf.

This trough is filled with water sufficient to cover the shelf to the height of an inch.

The use of this shelf is to support receivers, jars, or bell-glasses, which, being previously filled with water, are placed invertedly, their open end turned down upon the above-mentioned holes, through which the gases, conveyed there and directed by means of the funnel-shaped excavations, rise in the form of air-bubbles into the receiver.

When the gazeous fluids are capable of being absorbed by water, as is the case with some of them, the trough must be filled with mercury. The price and gravity of this fluid make it an object of convenience and economy that the trough should be smaller than when water is used.

A mercurial trough is best cut in marble, free-stone, or a solid block of wood. A trough about twelve inches long, three inches wide, and four deep, is sufficient for all private experiments.

Method of collecting Gases, and transferring them from one vessel to another.

If we are desirous of transmitting air from one vessel to another, it is necessary that the vessel destined to receive it be full of water, or some fluid heavier than air. For that purpose take a wide-mouthed bell-glass, or receiver; plunge it under the water in the trough, in order to fill it; then raise it with the mouth downwards, and place it on the shelf of the trough, so as to cover one or more of the holes in it.

It will now be full of water, and continue so as long as the mouth remains below the surface of the fluid in the cistern; for, in this case, the water is sustained in the vessel by the pressure of the atmosphere, in the same manner as the mercury is sustained in the barometer. It may without difficulty be imagined, that if common air (or any other fluid resembling common air in lightness and elasticity) be suffered to enter the inverted vessel filled with water, it will rise to the upper part, on account of its levity, and the surface of the water will subside. To exemplify this, take a glass, or any other vessel, in that state which is usually called *empty*, and plunge it into the water with its mouth downwards: scarce any of it will enter the glass, because its entrance is opposed by the elasticity of the included air; but if the vessel be turned with its mouth upwards, it immediately fills, and the air rises in bubbles to the surface. Suppose this operation be performed under one of the jars or receivers, which are filled with water, and placed upon the perforated shelf, the air will ascend in bubbles as before, but, instead of escaping, it will be caught in the upper part of the jar, and expel part of the water it contains.

In this manner we see that air may be emptied out of one vessel into another by a kind of inverted pouring, by which means it is made to ascend from the lower to the upper vessel. When the receiving vessel has a narrow neck, the air may be poured, in a similar manner, through an inverted funnel, inserted in its mouth.

If the air is to be transferred from a vessel that is stopped like a bottle, the bottle must be unstopped, with its orifice downwards in the water; and then inclined in such a manner that its neck may come under the perforated excavation of the shelf. The gas will escape from the bottle, and, passing into the vessel destined to receive it, will ascend in it in the form of bubbles.

In whatever manner this operation is performed, the necessity of the excavation in the lower part of the shelf may be readily conceived. It is, as mentioned before, destined to collect the gas which escapes from the vessel, and direct it in its passage towards the vessel adapted to receive it. Without this excavation, the gas, instead of proceeding to the place of its destination, would be dispersed and lost, unless the mouth of the receiving vessel were large.

The vessels, or receivers, for collecting the disengaged gases, should be glass cylinders, jars, or bell-glasses of various sizes; some of them should be open at both ends, others should be fitted with necks at the top, ground perfectly level, in order that they may be stopped by ground flat pieces of metal, glass, slate, &c.; others should be furnished with ground stoppers. Some should be graduated into cubic inches, and sub-divided into decimal or other equi-distant parts. Besides these, common glass-bottles, tumblers, &c. may be used.

Classification of Gases.

All the elastic aëriform fluids with which we are hitherto acquainted, are generally divided, by systematic writers, into two classes; namely, those that are *respirable* and *capable of maintaining combustion*, and those that are *not respirable*, and *incapable of maintaining combustion*. This division, indeed, has its advantage but the term respirable, in its physiological application, has been very differently employed by different writers. Sometimes by the respirability of a gas has been meant its power of supporting life, when repeatedly applied to the blood in the lungs. At other times all gases have been considered respirable which were capable of introduction into the lungs by voluntary efforts, without any relation to their vitality. In the last case, the word respirable seems to us most properly employed, and in this sense it is here used.

Non-respirable gases are those which, when applied to the external organs of respiration, stimulate the muscles of the epiglottis in such a manner as to keep it perfectly close on the glottis; thus preventing the smallest particle of gas from entering into the bronchia, in spite of voluntary exertions.

Of respirable gases, or those which are capable of being taken into the lungs by voluntary efforts, only one has the power of uniformly supporting life, namely, atmospheric air; other gases, when respired, sooner or later impair the health of the human constitution, or perhaps occasion death; but in different modes.

Some gases effect *no positive* change in the blood; animals immersed in it die of a disease produced by the privation of atmospheric air, analogous to that occasioned by their submersion in water.

Others again produce *some positive* change in the blood, as appears from the experiments of Dr. Beddoes and Professor Davy. They seem to render it incapable of supplying the nervous and muscular fibres with principles essential to sensibility and irritability. These gases, therefore, destroy animal life on a different principle.

It is obvious, therefore, that the above classification is not very precise, but capable of misleading the student without proper explanation.

Gaz, azotic. See *Nitrogen.*

Gaz, carbonic acid. This may be obtained by pouring any acid upon carbonate of lime, which thereby becomes decomposed; the effused acid combines with the lime, and forms a new neutral salt, and the carbonic acid is disengaged and escapes in the form of a colourless gaz, viz. carbonic acid gaz. See *Carbonic acid.*

Gaz hepatic. See *Hydrogen gas, sulphuretted.*

Gaz-hydrogen. Inflammable air. See *Hydrogen.*

Gaz, light carbonated hydrogen. See *Carburetted hydrogen gas.*

Gaz, heavy carbonated hydrogen. See *Carburetted hydrogen gas.*

Gazeous oxide of carbon, See *Carbon, gaseous oxide of.*

Geiso'ma. (From γεισον, the eaves of the house.) *Geison.* The prominent parts of the eye-brows, which hang over the eyes like the eaves of a house.

Gei'son. See *Geisoma.*

Gela'sinos. (From γελαω, to laugh.) An epithet for the four middle fore-teeth, because they are shewn in laughter.

Gela'smus. (From γελαω, to laugh.) The Sardonic laugh.

GE'LATINE. Gelly, or jelly. An animal substance soluble in water, but not in alkohol: capable of assuming a well-known elastic or tremulous consistence, by cooling, when the water is not too abundant, and liquifiable again, by increasing its temperature. This last property remarkably distinguishes it from albumen, which becomes consistent by heat. It is precipitated in an insoluble form by tannin, and it is this action of tannin on gelatine that is the foundation of the art of tanning leather.

Jellies are very common in our kitchens; they may be extracted from all the parts of animals, by boiling them in water. Hot water dissolves a large quantity of this substance. Acids likewise dissolve them, as do likewise more particularly the alkalies. Jelly, which has been extracted without long decoction, possesses most of the characters of vegetable mucilage; but it is seldom obtained without a mixture of albumen.

Jellies, in a pure state, have scarcely any smell or remarkable taste. By distillation, they afford an insipid and inodorous phlegm, which easily putrefies. A stronger heat causes them to swell up, become black, and emit a fœtid odour, accompanied with white acrid fumes. An impure volatile alkali, together with empyreumatic oil, then passes over, leaving a spongy coal, not easily burned, and containing common salt and phosphate of lime.

The jelly of various animal substances is prepared for the use of sea-faring persons under the name of portable soup. The whole art of performing this operation consists in boiling the meat, and taking the scum off, as usual, until the soup possesses the requisite flavour. It is then suffered to cool, in order that the fat may be separated. In the next place, it is mixed with five or six whites of eggs, and slightly boiled. This operation serves to clarify the liquid, by the removal of opaque particles, which unite with the white of egg at the time it becomes solid by the heat, and are consequently removed along with it. The liquor is then to be strained through flannel, and evaporated on the water-bath, to the consistence of a very thick paste; after which it is spread, rather thin, upon a smooth stone, then cut into cakes, and, lastly, dried in a stove, until it becomes brittle. These cakes may be kept four or five years, if defended from moisture. When intended to be used, nothing more is required to be done than to dissolve a sufficient quantity in boiling water, which by that means becomes converted into soup.

Gela'tio. (From *gelo*, to freeze.) Freezing; or that rigidity of the body which happens in a catalepsy, as if the person were frozen.

Geme'llus. (From *geminus*, double, having a fellow.) See *Gastrocnemius* and *Gemini.*

GEMINI. *Gemelli* of Winslow. Part of the *marsupialis* of Cowper. *Ischio spini trochanterien* of Dumas. This muscle has been a subject of dispute among anatomists since the days of Vesalius. Some describe it as two distinct muscles, and hence the name it has gotten of *gemini.* Others contend that it ought to be considered as a single muscle. The truth is, that it consists of two portions, which are united together by a tendinous and fleshy membrane, and afford a passage between them to the tendon of the obturator internus, which they inclose as it were in a purse. These two portions are placed under the glutæus maximus, between the ischium and the great trochanter.

The superior portion, which is the shortest and thickest of the two, arises fleshy from the external surface of the spine of the ischium; and the inferior, from the tuberosity of that bone, and likewise from the posterior sacro-ischiatic ligament. They are inserted, tendinous and fleshy, into the cavity at the root of the great trochanter. Between the two portions of this muscle, and the termination of the obturator internus, there is a small *bursa mucosa*, connected to both, and to that part of the capsular ligament of the joint which lies under the gemini.

This muscle assists in rolling the os femoris outwards, and prevents the tendon of the obturator internus from slipping out of its place while that muscle is in action.

Gemu'rsa. (From *gemo*, to groan; so called from the pain it was said to occasion in walking.) The name of an excrescence between the toes.

Genei'as. (From γενυς, the cheek.) The downy hairs which first cover the cheek; also the name of a bandage mentioned by Galen, which covers the cheek, and comes under the chin.

GENERATION. Many ingenious hypotheses have been instituted by physiologists to explain the mystery of generation; but the whole of our knowledge concerning it appears to be built upon the phenomena it affords, and may be seen in the works of Haller, Buffon, Cruickshanks, and Haighton. It is a sexual action, performed in different ways in most animals; many of them have different sexes and require conjunction: such are the human species, quadrupeds, and others. The females of quadrupeds have a matrix, separated into two cavities, *uterus bicornis*, and a considerable number of teats; they have no menstrual flux; most of them bear several young at a time, and the period of their gestation is generally short. The generation of birds is very different. The males have a strong genital organ, which is often double. The vulva in the females is placed behind the anus; the ovaries have no matrices, and there is a duct for the purpose of conveying the egg from the ovarium into the intestines: this passage is called the oviduct. The eggs of pullets have exhibited unexpected facts to physiologists, who examined the phenomena of incubation. The most important discoveries are those of the immortal Haller, who found the chicken perfectly formed, in eggs which were not fecundated. There is no determinate conjunction between fishes; the female deposits her eggs on the sands, over which the male passes, and emits its seminal fluid, doubtless for the purpose of fecundating them; these eggs are hatched after a certain time. The males of several oviparous quadrupeds have a double or forked organ. Insects exhibit all the varieties which are observed in other animals: there are some, indeed the greater number, which have the sexes in two separate individuals; among others, the reproduction is made either with or without conjunction, as in the vine-fretter; one of these insects, confined alone beneath a glass, produces a great number of others. The organ of the male, in insects, is usually armed with two hooks, to seize the female: the place of these organs is greatly varied; with some it as at the upper part of the belly, near the chest, as in the female dragon-fly; in others, it is at the extremity of the *antenna*, as in the male spider. Most worms are hermaphrodite; each individual has both sexes. Polypi, with respect to generation, are singular animals; they are reproduced by buds or offsets: a bud is separated from each vigorous polypus, which is fixed to some neighbouring body, and grows: polypi are likewise found on their surface, in the same manner as branches issue from plants. These are the principal modes of generation in animals. In the human species, which engages our attention more particularly, the phenomena are as follow:—The mode of congress of the man with the woman requires no description; but generation does not consist in that alone: there are certain states or conditions requisite for conception to take place. The ovum must have arrived at a state of maturity. There must be such a determination of blood to the uterus, that, together with the venereal stimulus, shall induce an action in the Fallopian tubes, by which the fimbriæ grasp the ovum that is to be impregnated. During this state of the parts, the semen virile must be propelled into the uterus, in order that its subtle and vivifying portion shall pass along the tube to the ovum. Fecundation having thus taken place, a motion is induced in the vivified ovum, which ruptures the tender vesicle that contains it; the fimbriæ of the Fallopian tube then grasp and convey it into the tube, which, by its peristaltic motion, conducts it into the cavity of the uterus, there to be evolved and brought to maturity, and, at the expiration of nine months, to be sent into the world.

GENERATION, FEMALE ORGANS OF. The parts subservient to generation in a woman are divided into external and internal.

The external parts are the *mons veneris*, the *labia*, the *perinæum*, the *clitoris*, and the *nymphæ*. To these may be added the *meatus urinarius*, or orifice of the urethra. The *hymen* may be esteemed the barrier between the external and internal parts. The internal parts of generation are the *vagina* and *uterus*, and its appendages.

GENERATION, MALE ORGANS OF. The parts which constitute the organs of generation in men are the *penis, testicles*, and *vesiculæ seminales*.

GENIO. (From γενειον, the chin.) Names compounded of this word belong to muscles which are attached to the chin.

GENIO-HYO-GLO'SSUS. (*Musculus genio-hyo-glossus*; from γενειον, the chin *υοειδες*, the os hyoides, and *γλωσσα*, the tongue, so called from its origin and insertion.) *Genio glossus* of some authors. This muscle forms the fourth layer between the lower jaw and os hyoides. It arises from a rough protuberance in the inside of the middle of the lower jaw; its fibres run like a fan, forwards, upwards, and backwards, and are inserted into the tip, middle, and root of the tongue, and base of the os hyoides, near its corner. Its use is to draw the tip of the tongue backwards into the mouth, the middle downwards, and to render its back concave. It also draws its root and the os hyoides forwards, and thrusts the tongue out of the mouth.

GENIO-HYOIDE′US. (*Musculus genio-hyoideus*; from *γενειον*, the chin, and *υοειδες*, the os hyoides; so called from its origin in the chin, and its insertion in the os hyoides.) This muscle constitutes the third layer between the lower jaw and os hyoides. It is a long, thin, and fleshy muscle, arising tendinous from a rough protuberance at the inside of the chin, and growing somewhat broader and thicker as it descends backward to be inserted by very short tendinous fibres into both the edges of the base of the os hyoides. It draws the os hyoides forwards to the chin.

Geniopharynge′us. The constrictor pharyngis superior.

Ge′nipi a′lbum. The plant which bears this name in the pharmacopœias, is the *Artemisia rupestris* of Linnæus; which see.

Ge′nipi ve′rum. The plant directed for medicinal purposes under this title, is the *Achillea; foliis pinnatis, pinnis simplicibus, glabris, punctatis*, of Haller. It has a very grateful smell, and a very bitter taste, and is exhibited in Switzerland in epilepsy, diarrhœa, and debility of the stomach.

GENI′STA. (From *genu*, a knee; so called from the inflection and angularity of its twigs.) 1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Decandria*.

2. The pharmacopœial name of the *Spartium scoparium*; which see.

Geni′sta canarie′nsis. The systematic name of the tree supposed to yield the *Rhodium lignum*: which see.

Geni′sta spino′sa i′ndica. *Bahel schulli.* An Indian tree, a decoction of the roots of which is diuretic. The leaves, boiled and sprinkled in vinegar, have the same effect, according to Ray.

Genita′le. (From *gigno*, to beget.) The privy member.

Genita′lium. (From *genitale*, the membrum virile.) A disease of the genital parts.

Genitu′ra. (From *gigno*.) The male seed. Also the membrum virile.

Ge′non. (From *γονυ*, the knee.) A moveable articulation like that of the knee.

Gensing. See *Ginseng.*

GENTIA′NA. (From *Gentius*, king of Illyria, who first used it.) Gentian.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*. Gentian.

2. The pharmacopœial name of the gentian root. See *Gentiana lutea*.

Gentia′na a′lba. See *Laserpitium latifolium*.

Gentia′na centau′rium. Lesser centaury was lately so called in the Linnæan system, but now chironia centaurium. See *Chironia centaurium*.

Gentia′na lu′tea. The systematic name of the officinal gentian. *Gentiana rubra.* Felwort. The gentian, that met with in the shops, is the root of the *Gentiana lutea; corollis subquinquefidis rotatis verticillatis, calycibus spathaceis*, of Linnæus; and is imported from Switzerland and Germany. It is the only medicinal part of the plant, has little or no smell, but to the taste manifests great bitterness, on which account it is in general use as a tonic, stomachic, anthelmintic, antiseptic, emmenagogue, and febrifuge. The officinal preparations of this root are the *infusum gentianæ compositum*, and *tinctura gentianæ composita*, of the London Pharmacopœia, and the *infusum amarum, vinum amarum, tinctura amara*, of the Edinburgh Pharmacopœia; and the *extractum gentianæ* is ordered by both.

Gentia′na ru′bra. See *Gentiana.*

GE′NU. The knee.

Genu′gra. (From *γονυ*, the knee, and *αγρα*, a seizure.) A name in Paracelsus for the gout in the knee.

GEOFFRÆ′A. *Geoffroya.* (Named in honour of Dr. Geoffrey.) 1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Decandria*.

2. The pharmacopœial name of the bark of the *Geoffroya inermis foliolis lanceolatis* of Swartz. The plant is a native of Jamaica, where it is distinguished by the name of cabbage-bark tree, or worm-bark tree. It has a mucilaginous and sweetish taste, and a disagreeable smell. According to Dr. Wright of Jamaica, it is powerfully medicinal as an anthelmintic.

Geoffroy′a Jamaice′nsis. The systematic name of the bastard cabbage-tree, or Bulge-water tree. The bark of the *Geoffroya Jamaicensis*, (*inermis foliolis lanceolatis*, of Swartz,) is principally used in Jamaica, and with great success, as a vermifuge.

Geoffroy′a suriname′nsis. The systematic name of a tree, the bark of which is esteemed as an anthelmintic.

GEOFFROY, Stephen Francis, was born at Paris in 1672. After giving him an excellent general education, his father, who was an apothecary, sent him to study his own profession at Montpelier; where he attended the several lectures. On his return to Paris, having already acquired considerable reputation, he was appointed to attend the Duke de Tallard, on his embassy to England, in 1698. Here he was very favourably received, and elected a member of the Royal Society: and he afterwards visited Holland and Italy. His attention was chiefly directed to natural history and the materia medica, his father wishing him to succeed to his establishment at Paris: however he became ambitious of the higher branch of the profession, and at length graduated in 1704. His reputation rapidly increased; and he was called in consultation even by the most distinguished practitioners. In 1709 he was appointed to the professorship of medicine on the death of Tournefort. He then undertook to deliver to his pupils a complete History of the Materia Medica, divided into mineral, vegetable, and animal substances; the first part of which he finished, and about half of the second: this was afterwards published from his papers, in Latin, in three octavo volumes. In 1712 he was made professor of chemistry in the king's garden; and, 14 years after, dean of the faculty. In this office he was led into some active disputes; whence his health, naturally delicate, began to decline; and he died in the beginning of 1731. Notwithstanding his illness, however, he completed a work, which had been deemed necessary by preceding deans, but never accomplished; namely, a Pharmacopœia, which was published under the name of "Code Medicamentaire de la Faculté de Paris."

Gera′nis. (From γερανος, a crane; so called from its supposed resemblance to an extended crane.) A bandage for a fractured clavicle.

GERA′NIUM. (From γερανος, a crane; so called because its pistil is long like the bill of a crane.) Class, *Monadelphia*. Order, *Decandria*. The name of a genus of plants in the Linnæan system. Geranium, or cranes-bill.

Gera′nium batrachioi′des. See *Geranium pratense.*

Gera′nium columbi′num. Doves foot. See *Geranium rotundifolium.*

Gera′nium moscha′tum. The adstringent property of this plant has induced practitioners to exhibit it in cases of debility and profluvia.

Gera′nium prate′nse. The systematic name of the crow-foot cranes-bill. *Geranium batrachioides.* This is the *Geranium pratense* of Linnæus; it possesses adstringent virtues, but in a slight degree.

Gera′nium robertia′num. Stinking cranes-bill. Herb robert. This common plant has been much esteemed as an external application in erysipelatous inflammations, cancer, mastodynia, and old ulcers, but is now deservedly fallen into disuse.

Gera′nium rotundifo′lium. The systematic name of the doves-foot. *Geranium columbinum.* This plant is slightly astringent.

Gera′nium sanguina′rium. See *Geranium sanguineum.*

Gera′nium sangui′neum. The systematic name of the *Geranium sanguinarium.* Bloody cranes-bill. *Geranium sanguineum* of Linnæus. The adstringent virtues ascribed to this plant do not appear to be considerable.

Germander. See *Teucrium chamædrys.*

Germander, water. See *Teucrium Scordium.*

Geroco′mia. (From γερων, an aged person, and κομεω, to be concerned about.) That part of medicine which regards the regimen and treatment of old age.

Gerontopo′gon. (From γερων, an old man, and πωγων, a beard; so called because its downy seed, while enclosed in the calyx, resembles the beard of an aged man.) The herb old man's beard. Purple-flowered tragopogon.

Geronto′xon. (From γερων, an old person, and τοξον, a dart.) A small ulcer, like the head of a dart, appearing sometimes in the cornea of old persons. The socket of a tooth.

Geropo′gon. See *Gerontopogon.*

Ge′ryon. Quicksilver.

GESNER, Conrad, was born at Zurich in 1516. His father was killed in the civil war, and left him in such poverty, that he was obliged to become a servant at Strasburg. His master allowed him to devote some time to study, in which he made great progress; and having acquired a little money, he went to Paris, where he improved rapidly in the classics and rhetoric, and then turned his attention to philosophy and medicine. But he was soon compelled to return to his native country, and teach the languages, &c. for a livelihood. This enabled him afterwards to resume his medical studies at Montpelier, and he graduated at Basil in 1540. He then settled in his native city, where he was appointed professor of philosophy, which office he discharged with great reputation for 24 years. He had an early predilection for botany, which led him to cultivate other parts of natural history; he was the first collector of a museum, and acquired the character of being the greatest naturalist since Aristotle. He also founded and supported a botanic garden, had numerous drawings and wooden engravings made of plants, and appears to have meditated a general work on that subject. He likewise discovered the only true principles of botanical arrangement in the flower and fruit. Though of a feeble and sickly constitution, he traversed the Alps, and even sometimes plunged into the waters in search of plants: he also carefully studied their medical properties, and frequently hazarded his life by experiments on himself; indeed he was at one time reported to have been killed by the root of doronicum. His other occupations prevented his entering very extensively into practice, but his enlarged views rendered him successful; and the profits of his profession enabled him to support the great expense of his favourite pursuits. He gave also many proofs of liberal and active friendship. He died of the plague in 1565. His chief works are his "Historiæ Animalium," in three folio volumes, with wooden cuts; and a pharmacopœia, entitled "De Secretis Remediis Thesaurus," which passed through many editions.

GE'UM. 1. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Polygynia.*

2. The pharmacopœial name of the two following species of this genus.

Ge'um rivale. The root is the part directed for medicinal uses. It is inodorous, and imparts an austere taste. In America it is in high estimation in the cure of intermittents, and is said to be more efficacious than the Peruvian bark. Diarrhœas and hæmorrhages are also stopped by its exhibition.

Ge'um urba'num. The systematic name of the herb bennet, or avens. *Caryophyllata. Herba benedicta. Caryophyllus vulgaris. Garyophilla. Janamunda.* The root of this plant, *Geum urbanum; floribus erectis, fructibus globosis villosis, aristis uncinatis nudis, foliis lyratis,* of Linnæus, has been employed as a gentle styptic, corroborant, and stomachic. It has a mildly austere, somewhat aromatic taste, and a very pleasant smell, of the clove kind. It is also esteemed on the continent as a febrifuge.

Giddiness. See *Vertigo.*

Gilead, balsam. See *Amyris gileadensis.*

GILBERT, William, was born at Colchester in 1540. After studying at Cambridge, he went abroad for improvement, and graduated at some foreign university. He returned with a high character for philosophical and chemical knowledge, and was admitted into the college of physicians in London, where he settled about the year 1573. He was so successful in his practice, that he was at length made first physician to Queen Elizabeth, who allowed him a pension to prosecute philosophical experiments. He died in 1603, leaving his books, apparatus, and minerals to the college of physicians. His capital work on the magnet was published three years before his death; it is not only the earliest complete system on that subject, but also one of the first specimens of philosophy founded upon experiments; which method the great Lord Bacon afterwards so strenuously recommended.

Gill-go-by-ground. See *Glecoma hederacea.*

Gilliflower. See *Dianthus caryophyllus.*

GIN. Geneva. Hollands. The names of a spirit distilled from malt or rye, which afterwards undergoes the same process, a second time, with juniper-berries. This is the original and most wholesome state of the spirit; but it is now prepared without juniper-berries, and is distilled from turpentine, which gives it something of a similar flavour. The consumption of this article, especially in the metropolis, is immense, and the consequences are, as Dr. Willan observes, pernicious to the health of the inhabitants.

Ginger. See *Zingiber.*

Gi'ngiber. See *Zingiber.*

Gingibra'chium. (From *gingivæ,* the gums, and *brachium,* the arm.) A name for the scurvy, because the gums, arms, and legs, are affected with it.

Gingi'dium. A species of *Daucus.*

Gi'ngihil. See *Zingiber.*

Gingipe'dium. (From *gingivæ,* the gums, and *pes,* the foot.) A name for the scurvy, because the gums, arms, and legs are affected.

GINGI'VÆ. (From *gigno,* to beget, because the teeth are, as it were, born in them.) The gums. See *Gums.*

GI'NGLYMUS. (*γιγγλυμος,* a hinge.) The hinge-like joint. A species of diarthrosis or moveable connection of bones, which admits of flexion and extension, as the knee-joint, &c.

GI'NSENG. (*Ginseng,* Indian.) See *Panax quinquefolium.*

Ginseng root. See *Panax quinquefolium.*

Gir. Quick-lime.

Gi'rmir. Tartar.

Gizzard. The gizzards or stomachs of poultry, with white flesh, have long been considered, in France, as medicinal. They have been recommended in obstructions of the urinary passages, complaints of the bladder, and nephritic pains; but particularly as a febrifuge. Bouillon Lagrange considers its principal substance as oxygenated gelatine, with a small quantity of extractive matter.

Glabe'lla. (From *glaber,* smooth; because it is without hair.) The space betwixt the eyebrows.

GLADI'OLUS. (Dim. of *gladius,* a sword; so named from the sword-like shape of its leaf.) The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Monogynia.*

Gladi'olus lu'teus. See *Iris pseudacorus.*

Gla'ma. (*γλαμα.*) The sordes of the eye.

GLAND. (*Glandula;* diminutive of *glans,* a gland.) A gland is an organic part of the body, composed of blood-vessels, nerves, and absorbents, and destined for the secretion or alteration of some peculiar fluid. The glands of the human body are divided, by anatomists, into different classes, either according to their structure, or the fluid they contain. According to their fabric, they are distinguished into four classes:

1. Simple glands.

2. Compounds of simple glands.
3. Conglobate glands.
4. Conglomerate glands.

According to their fluid contents, they are more properly divided into, 1. Mucous glands. 2. Sebaceous glands. 3. Lymphatic glands. 4. Salival glands. 5. Lachrymal glands.

Simple glands are small hollow follicles, covered with a peculiar membrane, and having a proper excretory duct, through which they evacuate the liquor contained in their cavity. Such are the mucous glands of the nose, tongue, fauces, trachea, stomach, intestines and urinary bladder, the sebaceous glands about the anus, and those of the ear. These simple glands are either dispersed here and there, or are contiguous to one another, forming a heap in such a manner that they are not covered by a common membrane, but each hath its own excretory duct, which is never joined to the excretory duct of another gland. The former are termed solitary simple glands, the latter aggregate or congregate simple glands.

The compound glands consist of many simple glands, the excretory ducts of which are joined in one common excretory duct; as the sebaceous glands of the face, lips, palate, and various parts of the skin, especially about the pubes.

Conglobate, or, as they are also called, lymphatic glands, are those into which lymphatic vessels enter, and from which they go out again: as the mesenteric, lumbar, &c. They have no excretory duct, but are composed of a texture of lymphatic vessels connected together by cellular membrane—they are the largest in the fœtus.

Conglomerate glands are composed of a congeries of many simple glands, the excretory ducts of which open into one common trunk: as the parotid gland, thyroid gland, pancreas, and all the salival glands. Conglomerate glands differ but little from the compound glands, yet they are composed of more simple glands than the compound.

The excretory duct of a gland is the duct through which the fluid of the gland is excreted. The vessels and nerves of glands always come from the neighbouring parts, and the arteries appear to possess a high degree of irritability. The use of the glands is to separate a peculiar liquor, or to change it. The use of the conglobate glands is unknown.

GLANDORP, Matthias Louis, was born at Cologne in 1595. Soon after commencing his medical pursuits, he went to Padua, which had at that time great reputation. He improved so much in anatomy under Spigelius, that he was deemed competent to give public demonstrations: and he took his degree in 1618. He settled in Bremen, whence his family originated; and he was so successful in practice, that he was raised to the most honourable offices. He was physician to the Archbishop and to the Republic, when he died in 1640. He left several works, with plates, containing many important observations on anatomy, &c. The principal are his "Speculum Chirurgorum," and a Treatise on Issues and Setons. He was very partial to the use of the actual cautery, even in the most common disorders.

GLA′NDULA LACHRYMA′LIS. See *Lachrymal gland.*

Gla′ndulæ myrtifo′rmes. See *Carunculæ myrtiformes.*

GLA′NDULÆ PACCHIO′NIÆ. (From *Pacchioni,* the name of the discoverer.) A number of small, oval, fatty substances, not yet ascertained to be glandular, situated under the dura mater, about the sides of the longitudinal sinus. Their use is not known.

Glandulosoca′rneus. An epithet given by Ruysch to some excrescences, which he observed in the bladder.

GLANS. A gland, or nut.

GLANS PE′NIS. The very vascular body that forms the apex of the penis. The posterior circle is termed the *corona glandis.* See *Corpus spongiosum urethræ.*

Gla′ns unguenta′ria. See *Guilandina moringa.*

GLASS. This substance is sometimes employed by surgeons, when roughly powdered, to destroy opacities of the cornea.

Glass of antimony. A vitreous sulphuretted oxide of antimony.

Glass wort, snail-seeded. See *Salsola kali.*

Gla′stum. (*Quasi callastum; from Callia,* who first used it.) The herb woad.

Glauber's salt. See *Sodæ sulphas.*

Glau′cium. (From γλαυκος, blue, or yellow; so called from its colour.) The yellow-horned poppy.

GLAUCO′MA. (From γλαυκος, blue; because of the eye becoming of a blue, or sea-green colour.) *Glaucosis.* An opacity of the vitreous humour. It is difficult to ascertain, and is only to be known by a very attentive examination of the eye.

Glauco′sis. See *Glaucoma.*

GLECO′MA. (From γληχων, the name of a plant in Dioscorides.) Class, *Didynamia.* Order, *Gymnospermia.* The name of a genus of plants in the Linnæan system. Ground ivy.

Gleco′ma hedera′cea. The systematic name of the ground ivy or gill. *Hedera terrestris. Glecoma hederacea; foliis reniformibus crenatis,* of Linnæus. This indigenous plant has a peculiar strong smell, and a bitterish somewhat aromatic taste. It is one of those plants which was formerly much esteemed for possessing virtues that, in the present age, cannot be detected. In obstinate coughs it is a favourite remedy with the poor.

Gle′chon. (From γληχων.) Pennyroyal.

Glechoni′tes. (From γληχων, pennyroyal.) Wine impregnated with pennyroyal.

GLEET. In consequence of the repeated attacks of gonorrhæa, and the debility of the part occasioned thereby, it not unfrequently happens, that a gleet, or constant small discharge takes place, or remains behind, after all danger of infection is removed. Mr. Hunter remarks, that it differs from gonorrhæa in being *uninfectious*, and in the discharge consisting of globular particles, contained in a slimy mucus, instead of serum. It is unattended with pain, scalding in making of water, &c.

GLE′NE. (γληνη.) Strictly signifies the cavity or socket of the eye; but by some anatomists is also used for that cavity of a bone which receives another within it.

GLE′NOID. (*Glenoides*; from γληνη, a cavity, and ειδος, resemblance.) The name of some articulate cavities of bones.

Gleu′cinum. (From γλευκος, must.) An ointment, in the preparation of which was must.

Gleu′xis. (From γλυκυς, sweet.) A sweet wine.

Gli′scere. To increase gradually, properly as fire does; but, by physical writers, is sometimes applied to the natural heat and increase of spirits; and by others to the exacerbation of fevers, which return periodically.

Gliscra′sma. (From γλισχραινω, to become glutinous.) Lentor. Viscidity.

Glischro′cholos. (From γλισχρος, viscid, and χολη, the bile.) An epithet for bilious viscid excrements.

Glisoma′rgo. White chalk.

GLISSON, Francis, was born in Dorsetshire, 1597. He studied at both the English universities; but took his degree of doctor in Cambridge, where he was made regius professor of Physic, which office he held about forty years. He settled however to practise in London, and became a Fellow of the College in 1635; four years after which he was chosen reader of Anatomy, and distinguished himself much by his lectures "De Morbis Partium," which he was requested to publish. During the civil wars he retired to Colchester, where he practised with great credit; and was there during the siege of that town by the Parliamentary forces. He was one of the members of the society, which, about the year 1645, held weekly meetings in London to promote Natural Philosophy; and which having removed to Oxford during the troubles, was augmented after the Restoration, and became ultimately the present Royal Society. He was afterwards several years president of the College of Physicians, and died at the advanced age of eighty. He left the following valuable works, 1. A Treatise on the Rickets. 2. The Anatomy of the Liver, which he described much more accurately than any one before, and particularly the capsule of the Vena Portarum, which has since been named after him. 3. A large metaphysical treatise "De Natura Substantiæ Energetica," after the manner of Aristotle. 4. A Treatise on the Stomach, Intestines, &c. a well arranged and comprehensive work, with various new observations, which came out the year before his death.

Glisson's Capsule. See *Capsule of Glisson.*

Globate gland. See *Gland.*

GLOBULA′RIA. (From *globus*, a globe; so called from the shape of its flower.) The French daisy.

Globula′ria a′lypum. The leaves of this plant are used in some parts of Spain in the cure of the venereal disease. It is said to act also as a powerful but safe cathartic.

GLO′BUS HYSTE′RICUS. The air rising in the œsophagus, and prevented by spasm from reaching the mouth, is so called by authors, because it mostly attends hysteria, and gives the sensation of a ball ascending in the throat.

Glo′mer. (A clue of thread.) Mostly applied to glands.

Glomerate gland. A gland formed of a glomer of sanguineous vessels, having no cavity, but furnished with an excretory duct; as the lachrymal and mammary glands.

Glossa′gra. (From γλωσσα, the tongue, and αγρα, a seizure.) A rheumatic pain in the tongue.

GLO′SSO. (From γλωσσα, the tongue.) Names compounded with this word belong to muscles, nerves, or vessels, from their being attached, or going to the tongue.

Glosso-pharynge′al nerves. The ninth pair of nerves. They arise from the processes of the cerebellum, which run to the medulla spinalis, and terminate by numerous branches in the muscles of the tongue and pharynx.

Glosso-pharynge′us. (*Musculus glossopharyngeus*; from γλωσσα, the tongue, and φαρυγξ, the pharynx: so named from its origin in the tongue, and its insertion in the pharynx.) See *Constrictor pharyngeus superior.*

Glo′sso-staphyli′nus. (*Musculus glossostaphylinus*; from γλωσσα, the tongue, and ϛαφυλη, the uvula; so named because it is fixed in the tongue, and terminates at the uvula.) See *Constrictor isthmi faucium.*

Glossoca′tochos. (From γλωσσα, tongue, and κατεχω, to hold.) An instrument in P. Ægineta for depressing the tongue. A spatula linguæ. The antient glossocatochus was a sort of forceps, one of the blades of which served to depress the tongue, while the other was applied under the chin.

GLOSSOCE'LE. (From γλωσσα, the tongue, and κηλη, a tumour.) An extrusion of the tongue.

Glossocoma. A retraction of the tongue.

Glossocomi'on. (From γλωσσα, a tongue, and κομεω, to guard.) By this was formerly meant a case for the tongue, for a hautboy; but the old surgeons, by metaphor, use it to signify an instrument, or case, for containing a fractured limb.

Glo'tta. (γλωττα, the tongue.) The tongue.

GLUCINE. For the discovery of this earth we are indebted to Vauquelin, who found it, in 1795, in the Aigue-marine or beryl, a transparent stone, of a green colour, and in the emerald of Peru. It exists combined with silex, alumine, lime, and oxid of iron in the one; and with the same earths, and oxid of chrome, in the other. It has lately been discovered in the gadolinite by Mr. Ekeberg.

Its name is taken from the Greek word (γλυκυς) which signifies sweet or saccharine, because it gives that taste to the salts it forms.

Glucine is white, light, and soft to the touch. It is insipid, and adheres to the tongue; and is infusible by itself in the fire. Its specific gravity is 2.967. It is soluble in alcalies and their carbonates, and in all the acids except the carbonic and phosphoric, and forms with them saccharine and slightly astringent salts. It is exceedingly soluble in sulphuric acid used to excess. It is fusible with borax, and forms with it a transparent glass. It absorbs one-fourth of its weight of carbonic acid. It decomposes sulphate of alumine. It is not precipitated by the hydro-sulphurets nor by prussiate of potash, but by all the succinates. Its affinity for the acids is intermediate between magnesia and alumine.

To obtain this earth, reduce some beryl to an impalpable powder, fuse it with three times its weight of potash, and dissolve the mass in muriatic acid. Separate the silex by evaporation and filtration, and decompose the remaining fluid by adding carbonate of potash; re-dissolve the deposit when washed in sulphuric acid, and by mingling this solution with sulphate of potash, alum will be obtained, which crystallizes.

Then mix the fluid with a solution of carbonate of ammonia, which must be used in excess; filter and boil it, and a white powder will gradually fall down, which is glucine.

GLO'TTIS. (From γλωττα, the tongue.) The superior opening of the larynx at the bottom of the tongue.

GLUTEAL ARTERY. A branch of the internal iliac artery.

GLU'TEN. (*Quasi geluten; from gelo, to congeal.*) Glue, Lentor. See *Gluten, animal and vegetable.*

GLU'TEN ANIMAL. This substance constitutes the basis of the fibres of all the solid parts. It resembles in its properties the gluten of vegetables.

GLU'TEN, VE'GETABLE. If wheat flour be made into a paste, and washed in a large quantity of water, it is separated into three distinct substances; a *mucilaginous saccharine matter*, which is readily dissolved in the liquor, and may be separated from it by evaporation; *starch*, which is suspended in the fluid, and subsides to the bottom by repose; and *gluten*, which remains in the hand, and is tenacious, very ductile, somewhat elastic, and of a brown gray colour. This glutinous substance is obtained from several vegetables in great abundance, and, when dried, becomes a horny mass. It is insoluble both in water and spirit of wine, and, if boiled with the former, it coagulates like the white of an egg. It burns like horn, and affords the same products by distillation in the dry way. It readily putrifies when kept in a cold and moist place.

GLUTE'US MA'XIMUS. (From γλουτος, the buttocks.) *Gluteus magnus* of Albinus. *Glutæus major* of Cowper, and *Ilio sacro femoral* of Dumas. This broad radiated muscle, which is divided into a number of strong fasciculi, is covered by a pretty thick aponeurosis derived from the *fascia lata*, and is situated immediately under the integuments. It arises fleshy from the outer lip of somewhat more than the posterior half of the spine of the ilium, from the ligaments that cover the two posterior spinous processes; from the posterior sacro-ischiatic ligament; and from the outer sides of the os sacrum and os coccygis. From these origins the fibres of the muscle run towards the great trochanter of the os femoris, where they form a broad and thick tendon, between which and the trochanter there is a considerable *bursa mucosa*. This tendon is inserted into the upper part of the *linea aspera*, for the space of two or three inches downwards; and sends off fibres to the fascia lata, and to the upper extremity of the vastus externus. This muscle serves to extend the thigh, by pulling it directly backwards; at the same time it draws it a little outwards, and thus assists in its rotatory motion. Its origin from the coccyx seems to prevent that bone from being forced too far backwards.

GLUTE'US ME'DIUS. *Ilio trochanterien* of Dumas. The posterior half of this muscle is covered by the gluteus maximus, which it greatly resembles in shape; but the anterior and upper part of it is covered only by the integuments, and by a tendinous membrane which belongs to the fascia lata. It arises fleshy from the outer lip of the anterior part of the spine of the ilium, from part of the posterior surface of that bone, and likewise from the fascia that covers it. From these origins its fibres run towards the great trochanter, into the outer and posterior part of which it is inserted by a broad tendon. Between this tendon and the trochanter there is a small thin *bursa mucosa*. The uses of this muscle are nearly the same as those of the gluteus maximus; but it is not confined, like that muscle, to rolling the os femoris outwards, its anterior portion being capable of turning that bone a little inwards. As it has no origin from the coccyx, it can have no effect on that bone.

GLUTE′US MI′NIMUS. *Glutæus minor* of Albinus and Cowper; and *Ilio ischii trochanterien* of Dumas. This, which is likewise a radiated muscle, is situated under the gluteus medius. In adults, and especially in old subjects, its outer surface is usually tendinous. It arises fleshy between the two semicircular ridges we observe on the outer surface of the ilium, and likewise from the edge of its great niche. Its fibres run, in different directions, towards a thick flat tendon, which adheres to a capsular ligament of the joint, and is inserted into the fore and upper part of the great trochanter. A small *bursa mucosa* may be observed between the tendon of this muscle and the trochanter. This muscle assists the two former in drawing the thigh backwards and outwards, and in rolling it. It may likewise serve to prevent the capsular ligament from being pinched in the motions of the joint.

GLU′TIA. (From γλουτος, the buttocks.) The two small protuberances in the brain, called *Nates*.

GLUTTU′PATENS. (From *gluttus*, the throat, and *pateo*, to extend.) An epithet for the stomach, which is an extension of the throat.

GLU′TUS. (γλουτος, from γλοιος, filthy.) The buttocks.

GLYCA′SMA. (From γλυκυς, sweet.) A sweet medicated wine.

GLYCYPI′CROS. (From γλυκυς, sweet, and πικρος, bitter; so called from its bitterish sweet taste.) The woody nightshade. See *Solanum Dulcamara*.

GLYCYRRHI′ZA. (From γλυκυς, sweet, and ῥιζα, a root.) 1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Decandria*.

2. The pharmacopœial name of liquorice. The sweet root of the *Glycyrrhiza glabra, leguminibus glabris, stipulis nullis, foliolo impari petiolato*, of Linnæus. A native of the south of Europe, but cultivated in Britain. The root contains a great quantity of saccharine matter, joined with some proportion of mucilage, and hence it has a viscid sweet taste. It is in common use as a pectoral or emollient, in catarrhal defluxions on the breast, coughs, hoarsenesses, &c. Infusions, or the extract made from it, which is called *Spanish liquorice*, afford likewise very commodious vehicles for the exhibition of other medicines; the liquorice taste concealing that of unpalatable drugs more effectually than syrups or any of the sweets of the saccharine kind.

GLYCYRRHI′ZA ECHINA′TA. This species of liquorice is substituted in some places for the root of the *glabra*.

GLYCYRRHI′ZA GLA′BRA. The systematic name of the officinal liquorice. See *Glycyrrhiza*.

GLYCYSA′NCON. (From γλυκυς, sweet, and αγκων, the elbow; so called from its sweetish taste, and its inflections, or elbows, at the joints.) A species of southern wood.

GNAPHA′LIUM. (From γναφαλον, cotton; so named from its soft downy surface.) 1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*.

2. The pharmacopœial name of the herb cotton weed. See *Gnaphalium dioicum*.

GNAPHA′LIUM ARENA′RIUM. The flowers of this plant, as well as those of the gnaphalium stœchas, are called in the pharmacopœias *flores elichrysi*. See *Gnaphalium stœchas*.

GNAPHA′LIUM DIOI′CUM. The systematic name of the *pes cati*. *Gnaphalium*. Cotton weed. The flores gnaphalii of the pharmacopœias, called also *flores hispidulæ: seu pedes cati*, are the produce of the *Gnaphalium dioicum* of Linnæus. They are now quite obsolete, but were formerly used as astringents, and recommended in the cure of hooping-cough, phthisis pulmonalis, and hæmoptysis.

GNAPHA′LIUM STŒ′CHAS. The systematic name of Goldilocks. *Elichrysum*. *Stœchas citrina*. This small downy plant is the *Gnaphalium stœchas* of Linnæus. The flowers are warm, pungent, and bitter, and said to possess aperient and corroborant virtues.

GNA′THUS. (From γναπτω, to bend; so called from their curvature.) The jaw, or jaw-bones. Also the cheek.

GNI′DIUS. A term applied by Hippocrates, and others since, to some medicinal precepts wrote in the island of Gnidos.

Goat's rue. See *Galega*.

GODDARD, JONATHAN, was born at Greenwich in 1617. After studying at Oxford, and travelling for improvement, he graduated at Cambridge, and settled to practise in London. He was elected a Fellow of the College of Physicians in 1646, and the following year, appointed lecturer on Anatomy. He formed a Society for Experimental Enquiry, which met at his house; and he was very assiduous in promoting its objects. Having gained considerable reputation, and sided with the popular party, he was appointed by Cromwell chief physician to the army, and attended him in some of his expeditions. Cromwell then made him warden of Merton College, Oxford, afterwards sole representative of that university in the short Parliament in 1655, and in the same year one of the Council of State. On the Restoration, being driven from Oxford, he removed to Gresham College, where he had been chosen professor of Physic. Here he continued to frequent those meetings, which gave birth to the Royal Society, and he was nominated one of the first council of that institution. He was an able and conscientious practitioner; and was induced, partly from the love of experimental chemistry, but principally from doubting the competency of apothecaries, to prepare his own medicines: in which however finding numerous obstacles, he published "A Discourse, setting forth the unhappy Condition of the Practice of Physic in London;" but this was of no avail. Two papers of his appeared in the Philosophical Transactions, and many others in Birch's History of the Royal Society. He died in 1674 of an aploplectic stroke.

GOELICKE, Andrew Offon, a German physician, acquired considerable reputation in the beginning of the eighteenth century, as a medical professor, and especially as an advocate of the doctrines of Stahl. He left several works, which relate principally to the History of Anatomy, &c. particularly the "Historia Medicinæ Universalis," which was published in six different portions between the years 1717 and 1720.

Goitre. See *Bronchocele*.

GOLD. *Aurum*. A metal found in nature only in a metallic state; most commonly in grains, ramifications, leaves, or crystals, rhomboidal, octahedral, or pyramidal. Its matrix is generally quartz, sand stone, siliceous schistus, &c. It is found also in the sands of many rivers, particularly in Africa, Hungary, and France, in minute irregular grains, called *gold-dust*. Native gold, found in compact masses, is never completely pure; it is alloyed with silver, or copper, and sometimes with iron and tellurium. The largest piece of native gold that has been hitherto discovered in Europe, was found in the county of Wicklow, in Ireland. Its weight was said to be twenty-two ounces, and the quantity of alloy it contained was very small. Several other pieces, exceeding one ounce, have also been discovered at the same place, in sand, covered with turf, and adjacent to a rivulet.

Gold is also met with in a particular sort of argentiferous copper pyrites, called in Hungary *Gelf*. This ore is found either massive, or crystallized in rhomboids, or other irregular quadrangular or polygonal masses. It exists likewise in the sulphurated ores of Nagaya in Transylvania. These all contain the metal called tellurium. Berthollet, and other French chemists, have obtained gold out of the ashes of vegetables.

Gold-cup. A vulgar name for many species of *Ranunculi*.

Golden-rod. See *Solidago virga aurea*.

Goldilocks. See *Gnaphalium stœchas*.

GOMPHI′ASIS. (From γομφος, a nail.) *Gomphiasmus*. A disease of the teeth, when they are loosened from the sockets, like nails drawn out of the wood.

Gomphia′smus. See *Gomphiasis*.

Go′mphioi. (From γομφος, a nail; so called because they are as nails driven into their sockets.) The dentes molares, or grinding teeth.

Gompho′ma. See *Gomphosis*.

GOMPHO′SIS. (From γομφοω, to drive in a nail.) *Gomphoma*. A species of immoveable connection of bones, in which one bone is fixed in another, like a nail in a board, as the teeth in the alveoli of the jaws.

Gona′lgia. See *Gonyalgia*.

Gona′gra. (From γονυ, the knee, and αγρα, a seizure.) The gout in the knee.

Go′ne. (γονη.) The seed. But in Hippocrates it is the uterus.

Gongro′na. (From γογγρος, a hard knot.)

1. The cramp.

2. A round tubercle in the trunk of a tree.

3. A hard round tumour of the nervous parts; but particularly a bronchocele, or other hard tumour of the neck.

Gongy′lion. (From γογγυλος, round.) A pill.

Gonoi′des. (From γονη, seed, and ειδος, form.) Resembling seed. Hippocrates often uses it as an epithet for the excrements of the belly, and for the contents of the urine, when there is something in them, which resembles the seminal matter.

GONORRHŒ′A. (From γονη, the semen, and ρεω, to flow; from a supposition of the antients, that it was a seminal flux.) A genus of disease in the class *locales*, and order *apocenoses* of Dr. Cullen's arrangement, who defines it a preternatural flux of fluid from the urethra in males, with or without libidinous desires. Females however are subject to the same complaint in some forms. He makes four species, viz.

1. *Gonorrhœa pura* or *benigna*; a puriform discharge from the urethra, without dysuria, or lascivious inclination, and not following an impure connection.

2. *Gonorrhœa impura, maligna, syphilitica, virulenta*; a discharge resembling pus, from the urethra, with heat of urine, &c. after impure coition, to which often succeeds a discharge of mucus from the urethra, with little or no dysury, called a gleet. *Fluor albus malignus*. *Blennorrhagia* of

Swediaur. In English, a *clap*, from the old French word *clapises*, which were public shops, kept and inhabited by single prostitutes, and generally confined to a particular quarter of the town, as is even now the case in several of the great towns of Italy. In Germany, the disorder is named *tripper*, from dripping; and in French, *chaudpisse*, from the heat and scalding in making water.

No certain rule can be laid down with regard to the time that a clap will take before it makes its appearance, after infection has been conveyed. With some persons it will shew itself in the course of three or four days, whilst, with others, there will not be the least appearance of it before the expiration of some weeks. It most usually is perceptible, however, in the space of from six to fourteen days, and in a male, begins with an uneasiness about the parts of generation, such as an itching in the glans penis, and a soreness and tingling sensation along the whole course of the urethra; soon after which, the person perceives an appearance of whitish matter at its orifice, and also some degree of pungency upon making water.

In the course of a few days, the discharge of matter will increase considerably; will assume, most probably, a greenish or yellowish hue, and will become thinner, and lose its adhesiveness; the parts will also be occupied with some degree of redness and inflammation, in consequence of which the glans will put on the appearance of a ripe cherry, the stream of urine will be smaller than usual, owing to the canal being made narrower by the inflamed state of its internal membrane, and a considerable degree of pain, and scalding heat will be experienced on every attempt to make water.

Where the inflammation prevails in a very high degree, it prevents the extension of the urethra, on the taking place of any erection, so that the penis is, at that time, curved downwards, with great pain, which is much increased, if attempted to be raised towards the belly, and the stimulus occasions it often to be erected, particularly when the patient is warm in bed, and so deprives him of sleep, producing, in some cases, an involuntary emission of semen.

In consequence of the inflammation, it sometimes happens that, at the time of making water, owing to the rupture of some small blood-vessel, a slight hæmorrhage ensues, and a small quantity of blood is voided. In consequence of inflammation, the prepuce likewise becomes often so swelled at the end, that it cannot be drawn back; which symptom is called a phimosis; or that, being drawn behind the glans, it cannot be returned, which is known by the name of paraphimosis. Now and then, from the same cause, little hard swellings arise on the lower surface of the penis, along the course of the urethra, and these perhaps suppurate and form into fistulous sores.

The adjacent parts sympathising with those already affected, the bladder becomes irritable, and incapable of retaining the urine for any length of time, which gives the patient a frequent inclination to make water, and he feels an uneasiness about the scrotum, perinæum, and fundament. Moreover, the glands of the groins grow indurated and enlarged, or perhaps the testicle becomes swelled and inflamed, in consequence of which he experiences excruciating pains, extending from the seat of the complaint up into the small of the back; he gets hot and restless, and a small symptomatic fever arises.

Where the parts are not occupied by much inflammation, few or none of the last-mentioned symptoms will arise, and only a discharge with a slight heat or scalding in making water will prevail.

If a gonorrhœa is neither irritated by any irregularity of the patient, nor prolonged by the want of timely and proper assistance, then, in the course of about a fortnight, or three weeks, the discharge, from having been thin and discoloured at first, will become thick, white, and of a ropy consistence; and from having gradually began to diminish in quantity, will at last cease entirely, together with every inflammatory symptom whatever; whereas, on the contrary, if the patient has led a life of intemperance and sensuality, has partaken freely of the bottle and high-seasoned meats, and has, at the same time, neglected to pursue the necessary means, it may then continue for many weeks or months; and, on going off, may leave a weakness or gleet behind it, besides being accompanied with the risk of giving rise, at some distant period, to a constitutional affection, especially if there has been a neglect of proper cleanliness; for where venereal matter has been suffered to lodge between the prepuce and glans penis for any time, so as to have occasioned either excoriation or ulceration, there will always be danger of its having been absorbed.

Another risk, arising from the long continuance of a gonorrhœa, especially if it has been attended with inflammatory symptoms, or has been of frequent recurrence, is the taking place of one or more strictures in the urethra. These are sure to occasion a considerable degree of difficulty, as well as pain, in making water, and, instead of its being discharged in a free and uninterrupted stream, it splits into two, or perhaps is voided drop by drop. Such affections become, from neglect, of a most serious and dangerous nature, as they not unfrequently block up the urethra, so as to induce a total suppression of urine.

Where the gonorrhœa has been of long standing, warty excrescences are likewise apt to arise about the parts of generation, owing to the matter falling and lodging thereon; and they not unfrequently prove both numerous and troublesome.

Having noticed every symptom which usually attends on gonorrhœa, in the male sex, it will only be necessary to observe, that the same heat and soreness in making water, and the same discharge of discoloured mucus, together with a slight pain in walking, and an uneasiness in sitting, take place in females as in the former; but as the parts in women, which are most apt to be affected by the venereal poison, are less complex in their nature, and fewer in number, than in men, so of course the former are not liable to many of the symptoms which the latter are; and, from the urinary canal being much shorter, and of a more simple form, in them than in men, they are seldom, if ever, incommoded by the taking place of strictures.

With women, it indeed often happens, that all the symptoms of a gonorrhœa are so very slight, they experience no other inconvenience than the discharge, except perhaps immediately after menstruation, at which period, it is no uncommon occurrence for them to perceive some degree of aggravation in the symptoms.

Women of a relaxed habit, and such as have had frequent miscarriages, are apt to be afflicted with a disease known by the name of fluor albus, which it is often difficult to distinguish from gonorrhœa virulenta, as the matter discharged in both is, in many cases, of the same colour and consistence. The surest way of forming a just conclusion, in instances of this nature, will be to draw it from an accurate investigation, both of the symptoms which are present and those which have preceded the discharge; as likewise, from the concurring circumstances, such as the character and mode of life of the person, and the probability there may be of her having had venereal infection conveyed to her by any connection in which she may be engaged.

Not long ago, it was generally supposed that gonorrhœa depended always upon ulcers in the urethra, producing a discharge of purulent matter; and such ulcers do, indeed, occur in consequence of a high degree of inflammation and suppuration; but many dissections of persons, who have died whilst labouring under a gonorrhœa, have clearly shown that the disease may, and often does, exist without any ulceration in the urethra, so that the discharge which appears is usually of a vitiated mucus, thrown out from the mucous follicles of the urethra. On opening this canal, in recent cases, it usually appears red and inflamed; its mucous glands are somewhat enlarged, and its cavity is filled with matter to within a small distance from its extremity. Where the disease has been of long continuance, its surface all along, even to the bladder, is generally found pale and relaxed, without any erosion.

3. *Gonorrhœa laxorum, libidinosa;* a pellucid discharge from the urethra, without erection of the penis, but with venereal thoughts while awake.

4. *Gonorrhœa dormientium oneirogonos.* When, during sleep, but dreaming of venereal engagements, there is an erection of the penis, and a seminal discharge.

Gonorrhœ'a beni'gna. See *Gonorrhœa.*

Gonorrhœ'a chorda'ta. A gonorrhœa accompanied with painful tension of the penis, called chordee.

Gonorrhœ'a dormie'ntium. Involuntary nocturnal emission.

Gonorrhœ'a impu'ra. The venereal gonorrhœa.

Gonorrhœ'a laxo'rum. Involuntary emission from debility.

Gonorrhœ'a libidino'sa. Involuntary emission from lust.

Gonorrhœ'a mali'gna. A venereal or malignant gonorrhœa.

Gonorrhœ'a muco'sa. A discharge of mucus from the urethra, or gleet.

Gonorrhœ'a oneiro'gonos. An involuntary nocturnal emission.

Gonorrhœ'a pu'ra. A common gleet.

Gonorrhœ'a spu'ria. A species of gonorrhœa affecting the glans.

Gonorrhœ'a syphili'tica. The venereal gonorrhœa.

Gonorrhœ'a ba'lani. A species of gonorrhœa affecting the glans penis only.

Gonya'lgia. (From γονυ, the knee, and αλγος, pain.) *Gonyalgia.* Gout in the knee.

Go'rdius. A species of vermes peculiar to hot climates.

Goose-foot, stinking. See *Chenopodium vulvaria.*

Goose-grass. See *Galium aparine.*

GOSSY'PIUM. (From *gotne,* whence *gottipium,* Egyptian.)

1. The name of a genus of plants in the Linnæan system. Class, *Monadelphia.* Order, *Polyandria.*

2. The pharmacopœial name of the cotton-tree. See *Gossypium herbaceum.*

Gossy'pium herba'ceum. The systematic name of the cotton-plant. *Gossypium. Bombax.* The seeds of the cotton-tree, *Gossypium herbaceum; foliis quinquelobis subtus eglandulosis, caule herbaceo,* of Linnæus, are directed for medicinal use in some foreign pharmacopœias; and are administered in coughs, on account of the mucilage they contain. The cotton, the produce of this tree is well known for domestic purposes.

Goulard's Extract. A saturated solution of acetate of lead. See *Plumbi subacetatis liquor.*

GOULSTON, Theodore, was born in Northamptonshire. After studying medicine at Oxford, he practised for a time with considerable reputation at Wymondham, of which his father was rector. Having taken his doctor's degree in 1610, he removed to London, and became a fellow of the College of Physicians. He was much esteemed for classical and theological learning, as well as in his profession. He died in 1632; and bequeathed 200l. to purchase a rent-charge for maintaining an annual Pathological Lecture, to be read at the college by one of the four junior doctors. He translated and wrote learned notes on some of the works of Aristotle and Galen; of which the latter were not published till after his death.

Gourd. See *Cucurbita.*

Gourd, bitter. See *Cucumis colocynthis.*

Gout. See *Arthritis.*

GRAAF, Reinier de, was born at Schoonhove in Holland, 1641. He studied physic at Leyden, where he made great progress, and at the age of twenty-two published his treatise "De Succo Pancreatico," which gained him considerable reputation. Two years after he went to France, and graduated at Angers; he then returned to his native country, and settled at Delft, where he was very successful in practice; but he died at the early age of thirty-two. He published three dissertations relative to the organs of generation in both sexes; upon which he had a controversy with Swammerdam.

GRA'CILIS. (*Gracilis,* from its smallness.) *Rectus interior femoris, sive gracilis interior* of Winslow. *Sous pubio creti tibial* of Dumas. This long, straight, and slender muscle, is situated immediately under the integuments, at the inner part of the thigh. It arises by a broad and thin tendon, from the anterior part of the ischium and pubis, and soon becoming fleshy, descends nearly in a straight direction along the inside of the thigh. A little above the knee, it terminates in a slender and roundish tendon, which afterwards becomes flatter, and is inserted into the middle of the tibia, behind and under the sartorius. Under the tendons of this and the rectus, there is a considerable *bursa mucosa,* which on one side adheres to them and to the tendon of the semitendinosus, and on the other to the capsular ligament of the knee. This muscle assists in bending the thigh and leg inwards.

Gra'men cani'num. See *Triticum repens.*

Gra'men cru'cis cyperioi'dis. *Gramen Ægyptiacum.* Egyptian cock's-foot grass, or grass of the cross. The roots and plants possess the same virtues as the dog's grass, and are serviceable in the earlier stages of dropsy. They are supposed to correct the bad smell of the breath, and to relieve nephritic disorders, colics, &c. although now neglected.

Gra'mia. The sordes of the eyes.

Gra'mme. (From γραμμη, a line; so called from its linear appearance.) The iris of the eye.

Gra'na cni'dia. See *Daphne mezereum.*

Gra'na infecto'ria. Kermes berries.

Gra'na ke'rmes. Kermes berries.

GRA'NA PARADI'SI. Grains of Paradise. See *Amomum.*

Gra'na ti'glia. See *Croton tiglium.*

Gra'na tincto'ria. Kermes berries.

Granadi'lla. (Dim. of *granado,* a pomegranate, Spanish; so called because at the top of the flower there are points, like the grains of a pomegranate.) The passion-flower, the fruit of which is said to possess refrigerating qualities.

Granatri'stum. A boil or carbuncle.

GRANA'TUM. (From *granum,* a grain, because it is full of seed.) See *Punica granatum.*

Grande'balæ. (*Quod in grandioribus ætate nascantur,* because they appear in those who are advanced in years.) The hairs under the arm-pits.

Gra'ndines. Small tumours on the eyelids. See *Grando.*

Grandino'sum os. The cuboid bone of the foot.

Gra'ndo. (*Quod similitudinem granorum habeat,* because it is in shape and size like a grain of seed.) Hail. A moveable tumour on the margin of the eyelid is so called, from its likeness to a hail-stone.

GRANULA'TION. (*Granulatio;* from *granum,* a grain.) The little grain-like fleshy bodies which form on the surfaces of ulcers and suppurating wounds, and serve both for filling up the cavities, and bringing nearer together and uniting their sides, are called granulations.

Nature is supposed to be active in bringing parts as nearly as possible to their original state, whose disposition, action, and structure, have been altered by accident, or disease; and after having, in her operations for this purpose, formed pus, she immediately sets about forming a new matter upon surfaces, in which there has been a breach of continuity. This process is called *granulating* or *incarnation;* and the substance formed is called *granulations.* The colour of healthy granulations is a deep florid red. When livid, they are unhealthy, and have only a languid circulation. Healthy granulations, on an exposed or flat surface, rise nearly even with the surface of the surrounding skin, and often a little higher; but when they exceed this, and take on a growing disposition, they are unhealthy, become soft, spongy, and without any disposition to form skin. Healthy granulations are always prone to unite to each other, so as to be the means of uniting parts.

Gra'num mo'schi. See *Hibiscus abelmoschus.*

Gra'num re'gium. The castor-oil seed.

Graphioi'des. (From *γραφις*, a pencil, and *ειδος*, a form.) The processus styliformis of the os temporis is so called; also a process of the ulna. The musculus biventer vel digastricus was formerly so called from its supposed origin from the above-mentioned process of the temple bone.

Gra'ssa. Borax.

GRATI'OLA. (Dim. of *gratia*, so named from its supposed admirable qualities.) Hyssop.

1. The name of a genus of plants in the Linnæan system. Class, *Diandria*. Order, *Monogynia*.

2. The pharmacopœial name of the hedge-hyssop. See *Gratiola officinalis*.

Grati'ola officina'lis. The systematic name of the hedge-hyssop; called also *digitalis minima, gratia dei, gratiola centaurioides*. This exotic plant, the *Gratiola; foliis lanceolatis, serratis, floribus pedunculatis*, of Linnæus, is a native of the south of Europe; but is raised in our gardens. The leaves have a nauseous bitter taste, but no remarkable smell; they purge and vomit briskly in the dose of half a drachm of the dry herb, or of a drachm infused in wine or water. This plant, in small doses, has been commonly employed as a cathartic and diuretic in hydropical diseases; and instances of its good effects in ascites and anasarca are recorded by many respectable practitioners. Gesner and Bergius found a scruple of the powder a sufficient dose, as in this quantity it frequently excited nausea or vomiting; others have given it to half a drachm, two scruples, a drachm, and even more.

An extract of the root of this plant is said to be more efficacious than the plant itself, and exhibited in the dose of half a drachm, or a drachm, in dysenteries, produces the best effects. We are also told by Kostrzewski that in the hospitals at Vienna, three maniacal patients were perfectly recovered by its use; and in the most confirmed cases of lues venerea, it effected a complete cure; it usually acted by increasing the urinary, cutaneous, or salivary discharges.

Grave'do. (From *gravis*, heavy.) A catarrh, or cold, with a sense of heaviness in the head.

Gravel. See *Calculus*.

Green sickness. See *Chlorosis*.

GREGORY, John, was born in 1725, his father being professor of medicine at King's College, Aberdeen: after studying under whom, he went to Edinburgh, Leyden, and Paris. At the age of 20 he was elected professor of philosophy at Aberdeen, and was made doctor of medicine. In the year 1756 he was chosen professor of medicine on the death of his brother James, who had succeeded his father in that chair. But about nine years after he went to Edinburgh; and was soon appointed professor of the practice of medicine there, Dr. Rutherford having resigned in his favour. The year following, on the death of Dr. White, he was nominated first physician to the king for Scotland. He also enjoyed very extensive practice, prior to his death in 1773. He published, in 1765, "A comparative View of the State and Faculties of Man with those of the Animal World," which contains many just and original remarks, and was very favourably received. Five years after his "Observations on the Duties and Offices of a Physician, &c." given in his introductory lectures, were made public surreptitiously; which induced him to print them in a more correct form. This work has been greatly admired. His last publication, "Elements of the Practice of Physic," was intended as a syllabus to his lectures; but he did not live to complete it.

Gressu'ra. (From *gradior*, to proceed.) The perinæum which goes from the pudendum to the anus.

GREW, Nehemiah, was born at Coventry; where, after graduating at some foreign university, he settled in practice. He there formed the idea of studying the anatomy of plants. His first essay on this subject was communicated to the Royal Society in 1670, and met with great approbation: whence he was induced to settle in London, and two years after became a fellow of that society; of which he was also at one period secretary. In 1680 he was made an honorary fellow of the College of Physicians. He is said to have attained considerable practice, and died in 1711. His "Anatomy of Vegetables, Roots, and Trunks," is a large collection of original and useful facts; though his theories have been invalidated by subsequent discoveries. He had no correct ideas of the propulsion or direction of the sap: but he was one of the first who adopted the doctrine of the sexes of plants; nor did even the principles of methodical arrangement entirely escape his notice. In 1681, he published a descriptive catalogue of the Museum of the Royal Society; to which were added some lectures on the comparative anatomy of the stomach and intestines. Another publication was entitled "Cosmographia Sacra, or a Discourse of the Universe; as it is the Creature and Kingdom of God.' His works were soon translated into French and Latin; but the latter very incorrectly.

Grie'lum. A name formerly applied to parsley; smallage.

Gripho'menos. (From *γριφος*, a net, because it surrounds the body as with a net.) Applied to pains which surround the body at the loins.

Gromwell, common. See *Lithospermum*.

GROSSULA'RIA. (Dim. of *grossus*, an unripe fig; so named because its fruit resembles an unripe fig.) The gooseberry, or gooseberry-bush.

Gro′tto del ca′ne. (Italian.) A grotto near Naples, in which dogs are suffocated. The carbonic acid gas rises about eighteen inches. A man therefore is not affected, but a dog forcibly held in, or who cannot rise above it, is soon killed, unless taken out. He is recovered by plunging him in an adjoining lake.

Ground liverwort. See *Lichen caninus.*

Ground ivy. A common plant used in the form of infusion or tea in pectoral complaints. See *Glecoma hederacea.*

Groundpine. See *Teucrium chamæpitys.*

Ground-nut. See *Bunium bulbocastanum.*

Groundsel. See *Senecio vulgaris.*

Gru′tum. *Milium.* A hard white tubercle of the skin, resembling in size and appearance a millet-seed.

Grypho′sis. (From *γρυπτοω*, to incurvate.) A disease of the nails, which turn inwards, and irritate the soft parts below.

GUAI′ACUM. (From the Spanish *Guayacan*, which is formed from the Indian *Hoaxacan.*)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

2. The pharmacopœial name of the officinal guaiacum, *Guciacum officinale foliis bijugis, obtusis*, of Linnæus. This tree is a native of the West Indian islands. The wood, gum, bark, fruit, and even the flowers, have been found to possess medicinal qualities. The wood, which is called *Guaiacum Americanum. Lignum vitæ. Lignum sanctum. Lignum benedictum. Palus sanctus*, is brought principally from Jamaica, in large pieces of four or five hundred weight each, and from its hardness and beauty is used for various articles of turnery ware. It scarcely discovers any smell, unless heated, or while rasping, in which circumstances it yields a light aromatic one: chewed, it impresses a slight acrimony, biting the palate and fauces. The gum, or rather resin, is obtained by wounding the bark in different parts of the body of the tree, or by what has been called jagging. It exudes copiously from the wounds, though gradually; and when a quantity is found accumulated upon the several wounded trees, hardened by exposure to the sun; it is gathered and packed up in small kegs for exportation: it is of a friable texture, of a deep greenish colour, and sometimes of a reddish hue; it has a pungent acrid taste, but little or no smell, unless heated. The *bark* contains less resinous matter than the wood, and is consequently a less powerful medicine, though in a recent state it is strongly carthartic. "The *fruit*," says a late author, "is purgative, and, for medicinal use, far excels the bark. A decoction of it has been known to cure the venereal disease, and even the yaws in its advanced stage, without the use of mercury." The *flowers*, or blossoms, are laxative, and in Jamaica are commonly given to the children in the form of syrup. It is only the wood and resin of guaiacum which are now in general medicinal use in Europe; and as the efficacy of the former is supposed to be derived merely from the quantity of resinous matter which it contains, they may be considered indiscriminately as the same medicine. Guaiacum was first introduced into the materia medica soon after the discovery of America, and previous to the use of mercury in the lues venersa, it was the principal remedy employed in the cure of that disease; its great success brought it into such repute, that it is said to have been sold for seven gold crowns a pound: but notwithstanding the very numerous testimonies in its favour, it often failed in curing the patient, and was at length entirely superseded by mercury; and though it be still occasionally employed in syphilis, it is rather with a view to correct other diseases in the habit, than for its effects as an anti-venereal. It is now more generally employed for its virtues in curing gouty and rheumatic pains, and some cutaneous diseases. Dr. Woodville and others frequently conjoined it with mercury and soap, and in some cases with bark or steel, and found it eminently useful as an alterative. In the Pharmacopœia it is directed in the form of mixture and tincture: the latter is ordered to be prepared in two ways, *viz.* with rectified spirit, and the aromatic spirit of ammonia. Of these latter compounds, the dose may be from two scruples to two drachms; the gum is generally given from six grains to 20 or even more, for a dose, either in pills or in a fluid form, by means of mucilage or the yolk of an egg. The decoctum lignorum (Pharm. Edinb.) of which guaiacum is the chief ingredient, is commonly taken in the quantity of a pint a day.

As many writers of the sixteenth century contended that guaiacum was a true specific for the venereal disease, and the celebrated Boerhaave maintained the same opinion, the following observations are inserted: Mr. Pearson mentions that when he was first intrusted with the care of the Lock Hospital, 1781, Mr. Bromfield and Mr. Williams were in the habit of reposing great confidence in the efficacy of a decoction of guaiacum wood. This was administered to such patients as had already employed the usual quantity of mercury; but who complained of nocturnal pains, or had gummata, nodes, ozæna, and other effects of the venereal virus, connected with secondary symptoms, as did not yield to a course of mercurial frictions. The diet consisted of raisius, and hard biscuit; from 2 to 4 pints of the decoction were taken every day; the hot bath was used twice a week; and a dose of antimonial wine and laudanum, or Dover's powder, was commonly taken every evening. Constant confinement to bed was not deemed necessary; neither was exposure to the vapour of burning spirit, with a view of exciting perspiration, often practised; as only a moist state of the skin was desired. This treatment was sometimes of singular advantage to those whose health had sustained injury from the disease, long confinement, and mercury. The strength increased; bad ulcers healed; exfoliations were completed; and these anomalous symptoms, which would have been exasperated by mercury, soon yielded to guaiacum.

Besides such cases, in which the good effects of guaiacum made it be erroneously regarded, as a specific for the lues venerea, the medicine was also formerly given, by some, on the first attack of the venereal disease. The disorder being thus benefitted, a radical cure was considered to be accomplished: and though frequent relapses followed, yet, as these partly yielded to the same remedy, its reputation was still kept up. Many diseases also, which got well, were probably not venereal cases. Mr. Pearson seems to allow, that in syphilitic affections, it may indeed operate like a true antidote, suspending, for a time, the progress of certain venereal symptoms, and removing other appearances altogether; but he observes, that experience has evinced, that the unsubdued virus yet remains active in the constitution.

Mr. Pearson has found guaiacum of little use in pains of the bones, except when it proved sudorific; but that it was then inferior to antimony or volatile alkali. When the constitution has been impaired by mercury and long confinement, and there is a thickened state of the ligaments, or periosteum, or foul ulcers still remaining, Mr. Pearson says, these effects will often subside during the exhibition of the decoction; and it will often suspend for a short time, the progress of certain secondary symptoms of the lues venerea: for instance, ulcers of the tonsils, venereal eruptions, and even nodes. Mr. Pearson, however, never knew one instance, in which guaiacum eradicated the virus; and he contends, that its being conjoined with mercury, neither increases the virtue of this mineral, lessens its bad effects, nor diminishes the necessity of giving a certain quantity of it. Mr. Pearson remarks that he has seen guaiacum produce good effects in many patients, having cutaneous diseases, the ozæna, and scrophulous affections of the membranes and ligaments.

Guila′ndina bo′nduc. The systematic name of the plant, the fruit of which is called *Bonduch indorum*. Molucca or bezoar nut. It possesses warm, bitter, and carminative virtues.

Guila′ndina mori′nga. This plant affords the ben-nut and the lignum nephriticum.

1. *Ben. Glans unguentaria. Ben nux. Balanus myrepsica. Coatis.* The oily acorn, or ben-nut. A whitish nut, about the size of a small filberd, of a roundish triangular shape, including a kernel of the same figure, covered with a white skin. It is the fruit of the *Guilandina moringa inermis, foliis subpinnatis, foliolis inferioribus ternatis,* of Linnæus. They were formerly employed to remove obstructions of the primæ viæ. The oil afforded by simple pressure, is remarkable for its not growing rancid in keeping, or, at least, not until it has stood for a number of years; and on this account, it is used in extricating the aromatic principle of such odoriferous flowers as yield little or no essential oil in distillation. The unalterability of this oil would render it the most valuable substance for cerates, or liniments, were it sufficiently common. It is actually employed for this purpose in many parts of Italy.

2. *Lignum nephriticum.* Nephritic wood. It is brought from America in large, compact, ponderous pieces, without knots, the outer part of a whitish or pale yellowish colour, the inner of a dark brown or red. When rasped, it gives out a faint aromatic smell. It is never used medicinally in this country, but stands high in reputation abroad, against difficulties of making urine, nephritic complaints, and most disorders of the kidneys and urinary passages.

Guinea-worm. The *Gordius medinensis.*

GUINTERIUS, John, was born in 1487, at Andernach in Germany. He was of obscure birth, and his real name is said to have been Winther. He shewed very early a great zeal for knowledge, and at the age of 12 went to Utrecht to study; but he had to struggle with great hardships, supported partly by his own industry, partly by the bounty of those, who commisserated his situation. At length, having given striking proofs of his talents, he was appointed professor of Greek at Louvain. But his inclination being to medicine, he went to Paris in 1525; where he was made doctor five years after. He was appointed physician to the king, and practised there during several years; giving also lectures on anatomy. His reputation had reached the north of Europe; and he received the most advantageous offers to repair to the court of Denmark. But in 1537 he was compelled by the religious disturbances to retire into Germany. At Strasburgh he was received with honour by the magistrates, and had a chair assigned him by the faculty; he also practised very extensively and successfully; and at length letters of nobility were conferred upon him by the emperor. He lived however only twelve years to enjoy these honours, having died in 1574. His works are numerous, consisting partly of translations of the best antient physicians, but principally of commentaries and illustrations of them.

GUM. The mucilage of vegetables. It is usually transparent, more or less brittle when dry, though difficultly pulverable; of an insipid, or slightly saccharine taste; soluble in, or capable of combining with, water in all proportions, to which it gives a gluey adhesive consistence, in proportion as its quantity is greater. It is separable, or coagulates by the action of weak acids; it is insoluble in alkohol, and in oil; and capable of the acid fermentation, when diluted with water. The destructive action of fire causes it to emit much carbonic acid, and converts it into coal without exhibiting any flame. Distillation affords water, acid, a small quantity of oil, a small quantity of ammonia, and much coal.

These are the leading properties of gums, rightly so called; but the inaccurate custom of former times applied the term gum to all concrete vegetable juices, so that in common we hear of gum copal, gum sandarach, and other gums, which are either pure resins, or mixtures of resins with the vegetable mucilage.

The principal gums are, 1. The common gums, obtained from the plum, the peach, the cherry tree, &c. 2. Gum arabic, which flows naturally from the acacia in Egypt, Arabia, and elsewhere. This forms a clear transparent mucilage with water. 3. Gum Seneca or Senegal. It does not greatly differ from gum arabic: the pieces are larger and clearer; and it seems to communicate a higher degree of the adhesive quality to water. It is much used by calico-printers and others. The first sort of gums are frequently sold by this name, but may be known by their darker colour. 4. Gum adragant or tragacanth. It is obtained from a small plant, a species of astragalus, growing in Syria, and other eastern parts. It comes to us in small white contorted pieces resembling worms. It is usually dearer than other gums, and forms a thicker jelly with water.

Mr. Willis has found, that the root of the common blue bell, hyacinthus non scriptus, dried and powdered, affords a mucilage possessing all the qualities of that from gum arabic. The roots of the vernal squill, white lily and orchis, equally yield mucilage. Lord Dundonald has extracted a mucilage also from lichens.

Gums treated with nitric acid afford the saclactic, malic, and oxalic acids.

Gum-boil. See *Parulis.*

GU′MMA. A strumous tumour on the periosteum of a bone.

Gu′mmi ara′bicum. See *Acacia vera.*

Gu′mmi cara′nnæ. See *Caranna.*

Gu′mmi ceraso′rum. The juices which exude from the bark of cherry-trees. It is very similar to gum arabic, for which it may be substituted.

Gu′mmi chi′bou. A spurious kind of gum elemi, but little used.

Gu′mmi cou′rbaril. An epithet sometimes applied to the juice of the *Hymenæa courbaril.* See *Anime.*

Gu′mmi eupho′rbii. See *Euphorbia.*

Gu′mmi ga′lda. See *Galda.*

Gu′mmi gambie′nse. See *Kino.*

Gu′mmi gu′ttæ. See *Stalagmitis.*

Gu′mmi he′deræ. See *Hedera helix.*

Gu′mmi juniperinum. See *Juniperus communis.*

Gu′mmi kikekunemalo. See *Kikekunemalo.*

Gu′mmi ki′no. See *Kino.*

Gu′mmi lacca. See *Lacca.*

Gu′mmi my′rrha. See *Myrrha.*

Gu′mmi resi′na lu′tea. An astringent gum resin from New Holland.

Gu′mmi ru′brum astri′ngens gambie′nse. See *Kino.*

Gu′mmi sagape′num. See *Sagapenum.*

Gu′mmi senegale′nse. See *Mimosa Senegal.*

Gu′mmi tragaca′nthæ. See *Astragalus.*

GUM-RE′SIN. *Gummi-resina.* Gum-resins are the juices of plants that are mixed with resin, and an extractive matter, which has been taken for a gummy substance. They seldom flow naturally from plants, but are mostly extracted by incision, in the form of white, yellow, or red fluids, which dry more or less quickly. Water, spirit of wine, wine or vinegar, dissolve them only in part, according to the proportion they contain of resin or extract. Gum-resins may also be formed by art, by digesting the parts of vegetables containing the gum-resin in diluted alkohol, and then evaporating the solution. For this reason most tinctures contain gum-resin. The principal gum-resins employed medicinally are aloes, ammoniacum, asafœtida, galbanum, gambogia, guaiacum, myrrha, olibanum, opoponax, sagapenum, sarcocolla, scammonium, and styrax.

GUMS. *Gingivæ.* The very vascular and elastic substance that covers the alveolar arches of the upper and under jaws, and embraces the necks of the teeth.

GU′TTA. *Alunsel.* A drop. Drops are uncertain forms of administering medicines. The shape of the bottle or of its mouth, from whence the drops fall, as well as the consistence of the fluid, occasion a considerable difference in the quantity administered.

Gutta is also a name of the apoplexy, from a supposition that its cause was a drop of blood falling from the brain upon the heart.

Gu′tta ga′mba. See *Stalagmitis.*

Gu′tta opa′ca. A name for the cataract.

Gu′tta sere′na. (So called by the Arabians.) See *Amaurosis.*

Gu′ttæ ni′græ. The black drops, occasionally called the Lancashire, or the Cheshire drops. A secret preparation of opium, said to be more active than the common tincture, and supposed to be less injurious, as seldom followed by head-ache.

Gu′ttæ rosa′ceæ. Red spots upon the face and nose.

Gu'ttural a'rtery. The superior thyroideal artery. The first branch of the external carotid.

Gymna'stica. (From γυμνος, naked, performed by naked men in the public games.) A method of curing diseases by exercise, or that part of physic which treats of the rules that are to be observed in all sorts of exercises, for the preservation of health. This is said to have been invented by one Herodicus, born at Salymbra, a city of Thrace; or, as some say, at Leutini in Sicily. He was first master of an academy, where young gentlemen came to learn warlike and manly exercises; and observing them to be very healthful on that account, he made exercise become an art in reference to the recovering of men out of diseases, as well as preserving them from them: and called it *Gymnastic*, which he made a great part of his practice of physic. But Hippocrates who was his scholar, blames him sometimes for his excesses with this view. And Plato exclaims against him with some warmth, for enjoining his patients to walk from Athens to Megara, which is about 25 miles, and to come home on foot as they went, as soon as ever they had but touched the walls of the city.

Gynæ'cia. (From γυνη, a woman.) It signifies the menses, and sometimes the lochia.

Gynæ'cium. (From γυνη, a woman.) A seraglio; the pudendum muliebre; also a name for *antimony*.

Gynæcoma'nia. (From γυνη, a woman, and μανια, madness.) That species of insanity that arises from love.

Gynæcoma'ston. (From γυνη, a woman, and μαϛος, a breast.) An enormous increase of the breasts of women.

Gynæcomy'stax. (From γυνη, a woman, and μυςταξ, a beard.) The hairs on the female pudenda.

H.

Habe'na. A bridle. A bandage for keeping the lips of wounds together, made in the form of a bridle.

Hacub. A species of carduus. *Gundelia tournefortii* of Linnæus:—the young shoots of which are eaten by the Indians, but the roots are emetic.

Hæmago'ga. (From αιμα, blood, and αγω, to bring off.) Medicines which promote the menstrual and hæmorrhoidal discharges.

Hæmalo'pia. (From αιμα, blood, and οπτομαι, to see.) A disease of the eyes, in which all things appear of a red colour. A variety of the pseudoblepsis imaginaria.

Hæ'malops. (From αιμα, blood, and ωψ, the face.) A red or livid mark in the face or eye. A blood-shot eye.

Hæma'nthus. (From αιμα, blood, and ανθος, a flower, so called from its colour.) The blood-flower.

HÆMATE'MESIS. (From αιμα, blood, and εμεω, to vomit.) *Vomitus cruentus*. A vomiting of blood. A vomiting of blood is readily to be distinguished from a discharge from the lungs, by its being usually preceded by a sense of weight, pain, or anxiety in the region of the stomach; by its being unaccompanied by any cough; by the blood being discharged in a very considerable quantity; by its being of a dark colour, and somewhat grumous; and by its being mixed with the other contents of the stomach.

The disease may be occasioned by any thing received into the stomach, which stimulates it violently or wounds it; or may proceed from blows, bruises, or any other cause capable of exciting inflammation in this organ, or of determining too great a flow of blood to it; but it arises more usually as a symptom of some other disease (such as a suppression of the menstrual, or hæmorrhoidal flux, or obstructions in the liver, spleen, and other viscera) than as a primary affection.

Hæmatemesis is seldom so profuse as to destroy the patient suddenly, and the principal danger seems to arise, either from the great debility which repeated attacks of the complaint induce, or from the lodgment of blood in the instestines, which by becoming putrid might occasion some other disagreeable disorder.

The appearances to be observed on dissection, where it proves fatal, will depend on the disease of which it has proved symptomatic.

This hæmorrhage, being usually rather of a passive character, does not admit of large evacuations. Where it arises, on the suppression of the menses, in young persons, and returns periodically, it may be useful to anticipate this by taking away a few ounces of blood; not neglecting proper means to help the function of the uterus. In moderate attacks, particularly where the bowels have been confined, the infusion of roses and sulphate of magnesia may be employed: if this should not check the bleeding the sulphuric acid may be exhibited more largely, or some of the more powerful astringents and tonics, as alum, tincture of muriate of iron, decoction of bark, or superacetate of lead. Where pain attends, opium should be given freely, taking care that the bowels be not constipated; and a blister to the epigastrium may be useful. If depending on scirrhous tumours, these must be attacked by mercury, hemlock, &c. In all cases the food should be light, and easy of digestion; but more nourishing as the patient is more exhausted.

Hæmati'tes. (From *αιμα*, blood, so named from its property of stopping blood, or from its colour.) *Lapis hæmatites.* An elegant iron ore called bloodstone. Finely levigated, and freed from the grosser parts by frequent washings with water, it has been long recommended in hæmorrhages, fluxes, uterine obstructions, &c. in doses of from one scruple to three or four.

Hæmati'tinus. (From *αιματιτης*, the bloodstone.) An epithet of a collyrium, in which was the bloodstone.

HÆMATOCE'LE. (From *αιμα*, blood, and *κηλη*, a tumour.) A swelling of the scrotum, or spermatic cord, proceeding from or caused by blood.

The distinction of the different kinds of hæmatocele, though not usually made, is absolutely necessary toward rightly understanding the disease; the general idea, or conception of which, appears to Mr. Pott to be somewhat erroneous, and to have produced a prognostic which is ill founded and hasty. According to this eminent surgeon, the disease, properly called hæmatocele, is of four kinds; two of which have their seat within the tunica vaginalis testis: one within the albuginea; and the fourth in the tunica communis or common cellular membrane, investing the spermatic vessels.

In the passing an instrument, in order to let out the water from an hydrocele of the vaginal coat, a vessel is sometimes wounded, which is of such size, as to tinge the fluid pretty deeply at the time of its running out: the orifice becoming close, when the water is all discharged, and a plaster being applied, the blood ceases to flow from thence but insinuates itself partly into the cavity of the vaginal coat, and partly into the cells of the dartos; making sometimes, in the space of a few hours, a tumour nearly equal in size to the original hydrocele. This is one species.

It sometimes happens in tapping an hydrocele, that although the fluid discharged by that operation be perfectly clear and limpid, yet in a very short space of time (sometimes in a few hours) the scrotum becomes as large as it was before, and palpably as full of a fluid. If a new puncture be now made, the discharge instead of being limpid (as before) is now either pure blood or very bloody. This is another species: but, like the preceding, confined to the tunica vaginalis.

The whole vascular compages of the testicle is sometimes very much enlarged, and at the same time rendered so lax and loose, that the tumour produced thereby has, to the fingers of an examiner, very much the appearance of a swelling composed of a mere fluid, supposed to be somewhat thick, or viscid. This is in some measure a deception; but not totally so: the greater part of the tumefaction is caused by the loosened texture of the testes; but there is very frequently a quantity of extravasated blood also.

If this be supposed to be an hydrocele, and pierced, the discharge will be mere blood. This is a third kind of hæmatocele; and very different, in all its circumstances, from the two preceding: the fluid is shed from the vessels of the glandular part of the testicle, and contained within the tunica albuginea.

The fourth consists in a rupture of, and an effusion of blood, from a branch of the spermatic vein, in its passage from the groin to the testicle. In which case, the extravasation is made into the tunica communis, or cellular membrane, investing the spermatic vessels.

Each of these species, Mr. Pott says, he has seen so distinctly, and perfectly, that he has not the smallest doubt concerning their existence, and of their difference from each other.

Hæmato'chysis. (From *αιμα*, blood, and *χεω*, to pour out.) A hæmorrhage or flux of blood.

HÆMATO'DES. (From *αιμα*, blood, and *ειδος*, appearance;) so called from the red colour of its flowers.

1. An old name for the bloody cranesbill. See *Geranium sanguineum.*

2. Now applied to a fungus or fleshy excrescence, which has somewhat the appearance of blood.

HÆMATO'LOGY. (From *αιμα*, blood, and *λογος*, a discourse.) *Hæmotologia.* The doctrine of the blood.

Hæmatomphaloce'le. (From *αιμα*, blood, *ομφαλος*, the navel, and *κηλη*, a tumour.) A species of ecchymosis. A tumour about the navel, from an extravasation of blood. It is mostly absorbed, but if too considerable, a puncture may be made to evacuate the blood, as in ecchymosis. See *Ecchymoma.*

Hæmatopede'sis. (From *αιμα*, blood, and *ϖεδαω*, a leap.) The leaping of the blood from a wounded artery.

Hæmato'sis. (From *αιμα*, blood.) An hæmorrhage or flux of blood.

HÆMATO'XYLON. (From *αιμα*, blood, and *ξυλον*, wood; so called from the red colour of its wood.) The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

Hæmato'xylon campechia'num. The systematic name of the logwood-tree. *Acacia Zeylonica.* The part inserted in the Pharmacopœia, is the wood, called *Hæmatoxyli lignum,* and formerly *lignum campechense. Lignum campechianum. Lignum campescanum. Lignum indicum. Lignum sappan.* Logwood. The wood of the *Hæmatoxylon campechianum* of Linnæus; it is of a solid texture and of a dark red colour. It is imported principally as a substance for dying, cut into junks and logs of about three feet in length; of these pieces the largest and thickest are preserved, as being of the deepest colour. Logwood has a sweetish sub-adstringent taste, and no remarkable smell; it gives a purplish red tincture both to watery and spirituous infusions, and tinges the stools, and sometimes the urine, of the same colour. It is employed medicinally as an asstringent and corroborant. In diarrhœas it has been found peculiarly efficacious, and has the recommendation of some of the first medical authorities; also in the latter stages of dysentery, when the obstructing causes are removed; to obviate the extreme laxity of the intestines usually superinduced by the repeated dejections. In the form of decoction the proportion is two ounces to 2 ℔s. of fluid, reduced by boiling to one. An extract is ordered in the pharmacopœias. The dose from ten to forty grains.

HÆMATO'XYLUM. (From *αιμα,* blood, and *ξυλον,* wood.)

The name in some pharmacopœias for the logwood; which is so called from its red colour. See *Hæmatoxylon campechianum.*

HÆMATU'RIA. (From *αιμα,* blood, and *ουρον,* urine.) The voiding of blood with urine. This disease is sometimes occasioned by falls, blows, bruises, or some violent exertion, such as hard riding and jumping; but it more usually arises, from a small stone lodged either in the kidney or ureter, which by its size or irregularity wounds the inner surface of the part it comes in contact with; in which case the blood discharged is most usually somewhat coagulated, and the urine deposits a sediment of a dark brown colour, resembling the grounds of coffee.

A discharge of blood by urine, when proceeding from the kidney or ureter, is commonly attended with an acute pain in the back, and some difficulty of making water, the urine which comes away first, being muddy and high coloured, but towards the close of its flowing, becoming transparent and of a natural appearance. When the blood proceeds immediately from the bladder, it is usually accompanied with a sense of heat and pain at the bottom of the belly.

The voiding of bloody urine is always attended with some danger, particularly when mixed with purulent matter. When it arises in the course of any malignant disease, it shews a highly putrid state of the blood, and always indicates a fatal termination.

The appearances to be observed on dissection will accord with those usually met with in the disease which has given rise to the complaint.

When the disease has resulted from a mechanical injury in a plethoric habit, it may be proper to take blood, and pursue the general antiphlogistic plan, opening the bowels occasionally with castor oil, &c. When owing to calculi, which cannot be removed, we must be chiefly content with palliative measures, giving alkalies or acids according to the quality of the urine; likewise mucilaginous drinks and glysters; and opium, fomentations, &c. to relieve pain; uva ursi also has been found useful under these circumstances; but more decidedly where the hæmorrhage is purely passive; in which case also some of the terebinthate remedies may be cautiously tried; and means of strengthening the constitution must not be neglected.

Hæmo'dia. (From *αιμωδεω,* to stupefy.) A painful stupor of the teeth, caused by acrid substances touching them.

Hæmo'ptoe. (From *αιμα,* blood, and *πτυω,* to spit up.) The spitting of blood. See *Hæmoptysis.*

HÆMO'PTYSIS. (From *αιμα,* blood, and *πτυω,* to spit) *Hæmoptoe.* A spitting of blood. A genus of disease arranged by Cullen in the class *pyrexiæ,* and order *hæmorrhagiæ.* It is characterized by coughing up florid or frothy blood, preceded usually by heat or pain in the chest, irritation in the larynx, and a saltish taste in the mouth. There are five species of this disease: 1. *Hæmoptysis plethorica,* from fulness of the vessels. 2. *Hæmoptysis violenta,* from some external violence. 3. *Hæmoptysis phthisica,* from ulcers corroding the small vessels. 4. *Hæmoptysis calculosa,* from calculous matter in the lungs. 5. *Hæmoptysis vicaria,* from the suppression of some customary evacuation.

It is readily to be distinguished from hæmatemesis, as in this last, the blood is usually thrown out in considerable quantities; and is, moreover of a darker colour, more grumous, and mixed with the other contents of the stomach; whereas blood proceeding from the lungs is usually in small quantity, of a florid colour, and mixed with a little frothy mucus only.

A spitting of blood arises most usually between the ages of 16 and 25, and may be occasioned by any violent exertion either in running, jumping, wrestling, singing loud, or blowing wind-instruments; as likewise by wounds, plethora, weak vessels, hectic fever, coughs, irregular living, excessive drinking, or a suppression of some accustomed discharge, such as the menstrual or hæmorrhoidal. It may likewise be occasioned by breathing air which is too much rarefied to be able properly to expand the lungs.

Persons in whom there is a faulty proportion, either in the vessels of the lungs, or in the capacity of the chest, being distinguished by a narrow thorax and prominent shoulders, or who are of a delicate make and sanguine temperament, seem much predisposed to this hæmorrhage; but in these, the complaint is often brought on by the concurrence of the various occasional and exciting causes before mentioned.

A spitting of blood is not, however, always to be considered as a primary disease. It is often only a symptom, and in some disorders, such as pleurisies, peripneumonies, and many fevers, often arises, and is the presage of a favourable termination.

Sometimes it is preceded (as has already been observed,) by a sense of weight and oppression at the chest, a dry tickling cough, and some slight difficulty of breathing. Sometimes it is ushered in with shiverings, coldness at the extremities, pains in the back and loins, flatulency, costiveness, and lassitude. The blood which is spit up is generally thin, and of a florid red colour; but sometimes it is thick, and of a dark or blackish cast; nothing, however, can be inferred from this circumstance, but that the blood has lain a longer or shorter time in the breast, before it was discharged.

An hæmoptoe is not attended with danger, where no symptoms of phthisis pulmonalis have preceded, or accompanied the hæmorrhage, or where it leaves behind no cough, dyspnæa, or other affection of the lungs; nor is it dangerous in a strong healthy person, of a sound constitution; but when it attacks persons of a weak lax fibre, and delicate habit, it may be difficult to remove it.

It seldom takes place to such a degree as to prove fatal at once; but when it does, the effusion is from some large vessel. The danger, therefore, will be in proportion as the discharge of blood comes from a large vessel, or a small one.

When the disease proves fatal, in consequence of the rupture of some large vessels, there is found, on dissection, a considerable quantity of clotted blood in the lungs, and there is usually more or less of an inflammatory appearance at the ruptured part. Where the disease terminates in pulmonary consumption, the same morbid appearances are to be met with as described under that particular head.

In this hæmorrhage, which is mostly of the active kind, the antiphlogistic regimen must be strictly observed; particularly avoiding heat, muscular exertion, and agitation of the mind; and restricting the patient to a light cooling, vegetable diet. Acidulated drink will be useful to quench the thirst, without so much liquid being taken. Where the blood is discharged copiously, but no great quantity has been lost already, it will be proper to attempt to check it by bleeding freely, if the habit will allow: and sometimes, where there is pain in the chest, local evacuations and blisters may be useful. The bowels should be well cleared with some cooling saline carthartic, which may be given in the infusion of roses. Digitalis is also a proper remedy, particularly where the pulse is very quick, from its sedative influence on the heart and arteries. Antimonials in nauseating doses have sometimes an excellent effect, as well by checking the force of the circulation, as by promoting diaphoresis; calomel also might be added with advantage; and opium, or other narcotic, to relieve pain and quiet cough, which may perhaps keep up the bleeding. Emetics have, on some occasions, been successful; but they are not altogether free from danger. In protracted cases internal astringents are given as alum, kino, &c. but their effects are very precarious: the superacetate of lead, however, is perhaps the most powerful medicine, especially combined with opium, and should always be resorted to in alarming or obstinate cases, though as it is liable to occasion colic and paralysis, its use should not be indiscriminate; but it acts probably rather as a sedative than astringent. Sometimes the application of cold water to some sensible part of the body, producing a general refrigeration, will check the bleeding. When the discharge is stopped, great attention to regimen is still required, to obviate its return, with occasional evacuations: the exercise of swinging, riding in an easy carriage, or on a gentle horse, or especially sailing, may keep up a salutary determination of the blood to other parts: an occasional blister may be applied, where there are marks of local disease, or an issue or seton perhaps answer better. Should hæmoptysis occasionally exhibit rather the passive character, evacuations must be sparingly used, and tonic medicines will be proper, with a more nutritious diet.

HÆMORRHA'GIA. (From αιμα, blood, and ῥηγνυμι, to break out.) A hæmorrhage, or flow of blood.

HÆMORRHA'GIÆ. Hæmorrhages, or fluxes of blood. An order in the class *pyrexiæ* of Cullen's Nosology is so called. It is characterized by pyrexia with a discharge of blood, without any external injury; the blood on venæsection exhibiting the buffy coat. The order *hæmorrhagiæ* contains the following genera of diseases, viz. epistaxis, hæmoptysis, (of which phthisis is represented as a sequel,) hæmorrhois and menorrhagia.

HÆMORRHOI'DAL ARTERIES. *Arteriæ hæmorrhoidales.* The arteries of the rectum are so called: they are sometimes two, and at other times three in number. 1. The upper hæmorrhoidal artery, which is the great branch of the lower mesenteric continued into the pelvis. 2. The middle hæmorrhoidal, which sometimes comes off from the hypogastric artery, and very often from the pudical artery. It is sometimes wanting. 3. The lower or external hæmorrhoidal is almost always a branch of the pudical artery, or that artery which goes to the penis

HÆMORRHOI'DAL VEINS. *Venæ Hæmorrhoidales.* These are two. 1. The external, which evacuates itself into the vena iliaca interna. 2. The internal, which conveys its blood into the vena portæ.

HÆMO'RRHOIS. (From αιμα, blood, and ρεω, to flow.) *Aimorrhois.* The Piles. A genus of disease in the class *pyrexiæ*, and order *hæmorrhagiæ* of Cullen. They are certain excrescenes or tumours arising about the verge of the anus, or the inferior part of the intestinum rectum; when they discharge blood, particularly upon the patients going to stool, the disease is known by the name of *bleeding piles*: but when there is no discharge it is called *blind piles*. The rectum, as well as the colon, is composed of several membranes, connected to each other by an intervening cellular substance; and as the muscular fibres of this intestine always tend, by their contraction, to lessen its cavity, the internal membrane, which is very lax, forms itself into several rugæ or folds. In this construction nature respects the use of the part, which occasionally gives passage to or allows the retention of the excrements, the hardness and bulk of which might produce considerable lacerations, if this intestine were not capable of dilatation. The arteries and veins subservient to this part are called hæmorrhoidal, and the blood that returns from hence is carried to the meseraic veins. The intestinum rectum is particularly subject to the hæmorrhoids, from its situation, structure, and use; for whilst the course of the blood is assisted in almost all the other veins of the body, by the distention of the adjacent muscles, and the pressure of the neighbouring parts, the blood in the hæmorrhoidal veins which is to ascend against the natural tendency of its own weight, is not only destitute of these assistances, but is impeded in its passage: for, first, the large excrements which lodge in this intestine dilate its sides, and the different resistances which they form there are so many impediments obstructing the return of the blood; not in the large veins, for they are placed along the external surface of the intestine, but in all the capillaries which enter into its composition. Secondly, as often as these large excrements, protruded by others, approach near the anus, their successive pressure upon the internal coats of the intestine, which they dilate, drives back the blood into the veins, and for so long suspends its course; the necessary consequence of which is, a distension of the veins in proportion to the quantity of blood that fills them. Thirdly, in every effort we make, either in going to stool, or upon any other occasion, the contraction of the abdominal muscles, and the diaphragm pressing the contents of the abdomen downwards, and these pressing upon the parts contained in the pelvis, another obstruction is thereby opposed to the return of the blood, not only in the large veins, but also in the capillaries, which, being of too weak a texture to resist the impulse of the blood that always tends to dilate them, may thereby become varicose.

The dilatation of all these vessels is the *primary cause* of the hæmorrhoids; for the internal coat of the intestine, and the cellular membrane which connects that to the muscular coat, are enlarged in proportion to the distension of the vessels of which they are composed. This distension, not being equal in every part, produces separate tumours in the gut, or at the verge of the anus, which increases according as the venal blood is obstructed in them, or circulates there more slowly.

Whatever, then, is capable of retarding the course of the blood in the hæmorrhoidal veins, may occasion this disease. Thus, persons that are generally costive, who are accustomed to sit long at stool, and strain hard; pregnant women, or such as have had difficult labours; and likewise persons who have an obstruction in their liver, are for the most part afflicted with the piles; yet every one has not the hæmorrhoids, the different causes which are mentioned above being not common to all, or at least not having in all the same effects. When the hæmorrhoids are once formed, they seldom disappear entirely, and we may judge of those within the rectum by those which, being at the verge of the anus, are plainly to be seen. A small pile, that has been painful for some days, may cease to be so, and dry up; but the skin does not afterwards retain its former firmness, being more lax and wrinkled, like the empty skin of a grape. If this external pile swells and sinks again several times, we may perceive, after each return, the remains of each pile, though shrivelled and decayed, yet still left larger than before. The case is the same with those that are situated within the rectum; they may happen indeed never to return again, if the cause that produced them is removed; but it is probable that the excrements in passing out occasion a return of the swelling, to which the external ones are less liable: for the internal piles make a sort of knots or tumours in the intestine, which straightening the passage, the excrements in passing out, occasion irritations there that are more or less painful in proportion to the efforts which the person makes in going to stool; and it is thus these tumours become gradually larger. The hæmorrhoids are subject to many variations; they may become inflamed from the above irritations to which they are exposed, and this inflammation cannot always be removed by art. In some, the inflammation terminates in an abscess, which arises in the middle of the tumour, and degenerates into a fistula. These piles are very painful till the abscess is formed. In others, the inflammation terminates by induration of the hæmorrhoid, which remains in a manner schirrous. These never lessen, but often grow larger. This schirrus sometimes ulcerates, and continually discharges a sanies, which the patient perceives by stains on his shirt, and by its occasioning a very troublesome itching about the verge of the anus. These kinds of hæmorrhoids sometimes turn cancerous. There are some hæmorrhoids, and those of different sizes, which are covered with so fine a skin as frequently to admit blood to pass through. This fine skin is only the internal coat of the rectum, greatly attenuated by the varicose distension of its vessels. The hæmorrhage may proceed from two causes, namely, either from an excoriation produced by the hardness of the excrements, or from the rupture of the tumefied vessels, which break by their too great distension. In some of these, the patient voids blood almost every time he goes to stool; in others not so constantly. We sometimes meet with men who have a periodical bleeding by the piles, not unlike the menses in women; and as this evacuation, if moderate, does not weaken the constitution, we may infer that it supplies some other evacuation which nature either ceases to carry on, or does not furnish in due quantity; and hence also we may explain why the suppression of this discharge, to which nature had been accustomed, is frequently attended with dangerous diseases. The hæmorrhoids are sometimes distended to that degree as to fill the rectum, so that if the excrements are at all hard they cannot pass. In this case the excrements force the hæmorrhoids out of the anus to procure a free passage, consequently the internal coat of the rectum, to which they are connected, yields to extension, and upon examining these patients immediately after having been at stool, a part of the internal coat of that gut is perceived. A difficulty will occur in the return of these, in proportion to their size, and as the verge of the anus is more or less contracted. If the bleeding piles come out in the same manner upon going to stool, it is then they void most blood, because the verge of the anus forms a kind of ligature above them. The treatment of this complaint will vary much, according to circumstances. When the loss of blood is considerable, we should endeavour to stop it by applying cold water, or ice; or some astringent, as a solution of alum, or sulphate of zinc: but a more certain way is making continued pressure on the part. At the same time internal astringents may be given; joined with opium, if much pain or irritation attend. Care must be taken, however, to avoid constipation: and in all cases patients find benefit from the steady use of some mild cathartic, procuring regular loose motions. Sulphur is mostly resorted to for this purpose; and especially in combination with supertartrate of potash, tamarinds, &c. in the form of electuary, usually answers very well; likewise castor oil is an excellent remedy in these cases. Should the parts be much inflamed, leeches may be applied near the anus, and cold saturnine lotions used; sometimes, however, fomenting with the decoction of poppy will give more relief; where symptomatic fever attends, the antiphlogistic regimen must be strictly observed, and besides clearing the bowels, antimonials may be given to promote diaphoresis. Where the tumours are considerable and flaccid, without inflammation, powerful astringent or even stimulant applications will be proper, together with similar internal medicines; and the part should be supported by a compress kept on by a proper bandage. An ointment of galls is often very useful, with opium to relieve pain; and some of the liquor plumbi subacetatis may be farther added, if there be a tendency to inflammation. In these cases of relaxed piles of some standing, the copaiba frequently does much good, both applied locally and taken internally, usually keeping the bowels regular; also the celebrated Ward's paste, a medicine of which the active ingredient is black pepper. Sometimes where a large tumour has been formed by extravasated blood, subsequently become organised, permanent relief can only be obtained by extirpating this.

Hæmosta′sia. (From *αιμα*, blood, and *ιϛημι*, to stand.) A stagnation of blood.

Hæmosta′tica. (From *αιμα*, blood, and *ϛαω*, to stop.) Styptics. Medicines which stop hæmorrhages.

HAEN, Anthony De, was born in Leyden in 1704, and became one of the distinguished pupils of the celebrated Boerhaave. After graduating at his native place, he settled at the Hague; where he practised with considerable reputation for nearly 20 years. Baron Van Swieten, being acquainted with the extent of his talents, invited him to Vienna, to assist in the plan of reform, which the Empress had consented to support, in the medical faculty of that capital. De Haen accordingly repaired thither in 1754, was made professor of the practice of medicine, and fully answered the expectations which had been formed of him.

He undertook a system of clinical education, as the best method of forming good physicians: the result of this was the collection of a great number of valuable observations, which were published in successive volumes of a work, entitled, "Ratio Medendi in Nosocomio Practico," amounting ultimately to 16. He left also several other works, as On the Division of Fevers, &c. and died at the age of 72. He was generally an enemy to new opinions and innovations in practice, which led him into several controversies; particularly against variolous inoculation, and the use of poisonous plants in medicine: but he exhibited much learning and practical knowledge.

Hagiospe'rmum. (From αγιος, holy, and σπερμα, seed, so called from its reputed virtues.) Wormseed.

Hagio'xylum. (From αγιος, holy, and ξυλον, wood, so named because of its medical virtues.) Guaiacum.

HAIR. *Pili. Capilli.* The hairs of the human body are thin, elastic, dry filaments, arising from the skin. They consist of the *bulb*, situated under the skin, which is a vascular and nervous vesicle; and a *trunk*, which perforates the skin and cuticle, and is covered with a peculiar vagina. The colour of hair varies; its seat, however, is in the medullary juice. The hair, according to its situation, is differently named; thus, on the head it is called *capilli*; over the eyes, *supercilia*; *cilia*, on the margin of the eyelids; *vibrissæ*, in the foramina of the nostrils; *pili auriculares*, in the external auditory passage; *mystax*, on the upper lip; and *barba*, on the lower jaw.

Hala'tium. (From αλs, salt.) A clyster composed chiefly of salt.

Halche'mia. (From αλs, salt, and χεω, to pour out.) The art of fusing salts.

Halelæ'um. (From αλs, salt, and ελαιον, oil.) A medicine composed of salt and oil.

Halica'cabum. (From αλs, the sea, and κακαϐος, night shade; so called because it grows upon the banks of the sea.) See *Physalis alkekengi.*

Ha'limus. (From αλs, the sea, because of its saltish taste.) Sea-purslane, said to be antispasmodic.

Halini'trum. (From αλs, the sea, and νιτρον, nitre.) Nitre, or rather rock salt.

HA'LITUS. (From *halito*, to breathe out.) A vapour or gas.

HALLER, Albert, was born at Berne, where his father was an advocate, in 1709. He displayed at a very early age extraordinary marks of industry and talents. He was intended for the church, but having lost his father when only 13, he soon after determined upon the medical profession. Having studied a short time at Tubingen, he was attracted to Leyden by the reputation of Boerhaave, to whom he has expressed his obligations in the most affectionate terms; but he took his degree at the former place, when about 17 years of age. He soon after visited England and France; then returning to his native country, first acquired a taste for botany, which he pursued with great zeal, making frequent excursions to the neighbouring mountains. He also composed a "Poem on the Alps," and other pieces, which were received with much applause. Having settled in his native city, about 1730, he began to give lectures on anatomy, but with indifferent success; and some detached pieces on anatomy and botany having gained him considerable reputation abroad, he was invited by George II., in 1736, to become professor in the university, which he had recently founded at Gottingen. He accepted this advantageous offer, and though his arrival was rendered melancholy by the loss of a beloved wife, from some accident which occurred in the journey, he commenced at once the duties of his office with great zeal; he encouraged the most industrious of his pupils to institute an experimental investigation on some part of the animal œconomy, affording them his assistance therein. He was likewise himself indefatigable in similar researches, during the 17 years which he spent there, having in view a grand reform in physiology, which his writings ultimately effected, dissipating the metaphysical and chemical jargon, whereby it was before obscured. He procured the establishment of a botanic garden, an anatomical theatre, a school for surgery and for midwifery, with a lying-in-hospital, and other useful institutions at that university. He received also many honourable testimonies of his fame, being chosen a member of the Royal Societies of Stockholm and London, made physician and counsellor to George II., and the Emperor conferred on him the title of Baron; which however he declined, as it would not have been esteemed in his native country. To this he returned in 1753, and during the remainder of his life discharged various important public offices there. He ultimately received every testimony of the general estimation in which he was held; the learned societies of Europe, as well as several sovereigns, vying with each other in conferring honours upon him. His constitution was delicate, and impatience of pain or interruption to his studies, led him to use violent remedies when ill; however by temperance and activity he reached an advanced age, having died towards the end of 1777. He was one of the most universally informed men in modern times. He spoke with equal facility the German,, French and Latin languages; and read all the other tongues of Europe, except the Sclavonic; and there was scarcely any book of reputation, with which he was not acquainted. His own works were extremely numerous, on anatomy, physiology, pathology, surgery, botany, &c. besides his poems and political and religious publications. The principal are, 1. His large work on the Botany of Switzerland, in 3 vols. folio, with many plates; 2. Commentaries on Boerhaave's Lectures, 7 vols. octavo; 3. Elements of Physiology, 8 vols. quarto, a work of the greatest merit; 4. His "Bibliotheca," or Chronological Histories of Authors, with brief Analyses; 2 vols. quarto on Botany, two on Surgery, two on Anatomy, and four on the Practice of Medicine, displaying an immense body of research.

HALLUCINA'TIO. (From *hallucinor*, to err.) A depraved or erroneous imagination.

HA'LO. (From αλος, an area or circle.) The red circle surrounding the nipple, which becomes somewhat brown in old people, and is beset with many sebaceous glands.

Halmyro'des, (From αλμυρος, salted.) A term applied to the humours; it means acrimonious. It is also applied to fevers which communicate such an itching sensation as is perceived from handling salt substances.

Hama'lgama. See *Amalgam.*

HAMPSTEAD WATER. A good chalybeate mineral water in the neighbourhood of London.

HA'MULUS. (Dim. of *hamus*, a hook.) *Hamus.* A term in anatomy, applied to any hook-like process, as the hamulus of the pterygoid process of the sphenoid bone.

Ha'mus. See *Hamulus.*

HAND. *Manus.* The hand is composed of the carpus or wrist, metacarpus, and fingers. The arteries of the hand are the *palmary arch* and the *digital arteries.* The veins are the *digital*, the *cephalic of the thumb*, and the *salvatella.* The nerves are the *cutaneus externus* and *internus.*

Harde'sia. See *Lapis Hibernicus.*

HARE-LIP. *Lagocheilus. Labia leporina.* A fissure or longitudinal division of one or both lips. Children are frequently born with this kind of malformation, particularly of the upper lip. Sometimes the portions of the lip, which ought to be united, have a considerable space between them; in other instances they are not much apart. The cleft is occasionally double, there being a little lobe, or small portion of the lip, situated between the two fissures. Every species of the deformity has the same appellation of hare-lip, in consequence of the imagined resemblance which the part has to the upper lip of a hare.

The fissure commonly affects only the lip itself. In many cases, however, it extends along the bones of the palate, even as far as the uvula. Sometimes these bones are totally wanting; sometimes they are only divided by a fissure.

Such a malformation is always peculiarly afflicting. In its least degree, it constantly occasions considerable deformity; and when it is more marked, it frequently hinders infants from sucking, and makes it indispensable to nourish them by other means. When the lower lip alone is affected, which is more rarely the case, the child can neither retain its saliva, nor learn to speak, except with the greatest impediment. But when the fissure pervades the palate, the patient not only never articulates perfectly, but cannot masticate nor swallow, except with great difficulty, on account of the food readily getting up into the nose.

HARMO'NIA. (From αρω, to fit together.) Harmony. A species of synarthrosis, or immoveable connection of bones, in which bones are connected together by means of rough margins, not dentiform: in this manner most of the bones of the face are connected together.

HARRIS, Walter, was born at Gloucester about the year 1651. He took the degree of bachelor of physic at Oxford, but having embraced the Roman Catholic religion, he was made doctor at some French University. He settled in London in 1676, and two years after to evade the order, that all Catholics should quit the metropolis, he publicly adopted the Protestant Faith. His practice rapidly augmented, and on the accession of William III. he was appointed his physician in ordinary. He died in 1725. His principal work "De Morbis Acutis Infantum," is said to have been published at the suggestion of the celebrated Sydenham: it passed through several editions. He left also a Treatise on the Plague, and a collection of medical and surgical papers, which had been read before the College of Physicians.

HARROGATE WATER. The villages of High and Low Harrogate are situate in the centre of the county of York, adjoining the town of Knaresborough. The whole of Harrogate, in particular, has long enjoyed considerable reputation, by possessing two kinds of very valuable springs; and, some years ago, the chalybeate was the only one that was used internally, whilst the sulphureous water was confined to external use. At present, however, the latter is employed largely as an internal medicine.

The sulphureous springs of Harrogate are four in number, of the same quality, though different in the degree of their powers. This water, when first taken up, appears perfectly clear and transparent, and sends forth a few air bubbles, but not in any quantity. It possesses a very strong sulphureous and fetid smell, precisely like that of a damp rusty gun barrel, or bilge-water. To the taste it is bitter, nauseous, and strongly saline, which is soon borne without any disgust. In a few hours of exposure this water loses its transparency, and becomes somewhat pearly, and rather greenish to the eye; its sulphureous smell abates, and at last the sulphur is deposited in the form of a thin film, on the bottom and sides of the vessel in which it is kept. The volatile productions of this water show carbonic acid, sulphuretted hydrogen, and azotic gas.

The sensible effects which this water excites, are often a head-ache and giddiness on being first drunk, followed by a purgative operation, which is speedy and mild, without any attendant gripes; and this is the only apparent effect the exhibition of this water displays.

The diseases in which this water is used are numerous, particularly of the alimentary canal, and irregularity of the bilious secretions. Under this water the health, appetite, and spirits improve; and, from its opening effects, it cannot fail to be useful in the costive habit of hypochondriasis. But the highest recommendation of this water has been in cutaneous diseases, and for this purpose it is universally employed, both as an internal medicine, and an external application: in this united form, it is of particular service in the most obstinate and complicated forms of cutaneous affections; nor is it less so in states and symptoms supposed connected with worms, especially with the round worm and ascarides, when taken in such a dose as to prove a brisk purgative; and in the latter case also, when used as a clyster, the ascarides being chiefly confined to the rectum, and therefore within the reach of this form of medicine. From the union of the sulphureous and saline ingredients, the benefit of its use has been long established in hæmorrhoidal affections.

A course of Harrogate waters should be conducted so as to produce sensible effects on the bowels; half a pint taken in the morning, and repeated three or four times, will produce it, and its nauseating taste may be corrected by taking a dry biscuit, or a bit of coarse bread after it. The course must be continued, in obstinate cases, a period of some months, before a cure can be expected.

HARTFELL WATER. This mineral water is near Moffat, in Scotland: it contains iron dissolved by the sulphuric acid, and is much celebrated in scrophulous affections, and cutaneous diseases. It is used no less as an external application, than drank internally. The effects of this water, at first, are some degree of drowsiness, vertigo, and pain in the head, which soon go off, and this may be hastened by a slight purge. It produces generally a flow of urine, and an increase of appetite. It has acquired much reputation also in old and languid ulcers, where the texture of the diseased part is very lax, and the discharge profuse and ill-conditioned.

The dose of this water is more limited than that of most of the mineral springs which are used medicinally. It is of importance in all cases, and especially in delicate and irritable habits, to begin with a very small quantity, for an over dose is apt to be very soon rejected by the stomach, or to occasion griping and disturbance in the intestinal canal; and it is never as a direct purgative that this water is intended to be employed. Few patients will bear more than an English pint in the course of the day; but this quantity may be long continued. It is often advisable to warm the water for delicate stomachs, and this may be done without occasioning any material change in its properties.

HARTLEY, David, was born in 1705, son of a clergyman in Yorkshire. He studied at Cambridge, and was intended for the church, but scruples about subscribing to the 39 Articles led him to change to the medical profession; for which his talents and benevolent disposition well qualified him. After practising in different parts of the country, he settled for some time in London, but finally went to Bath, where he died in 1757. He published some tracts concerning the stone, especially in commendation of Mrs. Stephens' medicine, and appears to have been chiefly instrumental in procuring her a reward from Parliament; yet he is said to have died of the disease after taking above two hundred pounds of soap, the principal ingredient in that nostrum. Some other papers were also written by him: but the principal work, upon which his fame securely rests, is a metaphysical treatise, entitled "Observations on Man, his Frame, his Duty, and his Expectations." The doctrine of vibration, indeed, on which he explained sensation, is merely gratuitous; but his Disquisitions on the Power of Association, and other mental Phenomena, evince great subtlety and accuracy of research.

Hartshorn. See *Cornu.*

Hartshorn shavings. See *Cornu.*

Hart's tongue. See *Asplenium Scholopendrium.*

Hart-wort. See *Laserpitium siler.*

Hart-wort of Marseilles. See *Seseli tortuosum.*

HARVEY, William, the illustrious discoverer of the circulation of the blood, was born at Folkstone in Kent, in 1578. After studying four years at Cambridge, he went abroad at the age of 19, visited France and Germany, and then fixed himself at Padua, which was the most celebrated medical school in Europe, where he was created Doctor in 1602. On returning to England he repeated his graduation at Cambridge, and settled in London: he became a Fellow of the College of Physicians in 1603, and soon after physician to St. Bartholomew's Hospital. In 1615, he was appointed Lecturer on Anatomy and Surgery to the College, which was probably the more immediate cause of the publication of his grand discovery. He appears to have withheld his opinions from the world, until reiterated experiment had confirmed them, and enabled him to prove the whole in detail, with every evidence, of which the subject will admit. The promulgation of this important doctrine brought on him the most unjust opposition, some condemning it as an innovation, others pretending that it was known before; and he complained, that his practice materially declined afterwards: however he had the satisfaction of living to see the truth fully established. He likewise received considerable marks of royal favour from James and Charles I., to whom he was appointed physician; and the latter particularly assisted his enquiries concerning generation, by the opportunity of dissecting numerous females of the deer kind in different stages of pregnancy. During the civil war, when he retired to Oxford, his house in London was pillaged, and many valuable papers, the result of several years labour, destroyed. He published his first work on the circulation in 1628, at Frankfort, as the best means of circulating his opinions throughout Europe; after which he found it necessary to write two "Exercitations" in refutation of his opponents. In 1651 he allowed his other great work, "De Generatione Animalium" to be made public, leading to the inference of the universal prevalence of oval generation. In the year following he had the gratification of seeing his bust in marble, with a suitable inscription recording his discoveries, placed in the hall of the College of Physicians by a vote of that body; and he was soon after chosen President, but declined the office on account of his age and infirmities. In return he presented to the College an elegantly furnished convocation room, and a museum filled with choice books and surgical instruments. He also gave up his paternal estate of 56 pounds per annum for the institution of an annual feast, at which a Latin oration should be spoken, in commemoration of the benefactors of the College, &c. He died in 1658. A splendid edition of his works was printed in 1766, by the College, in quarto, to which a Latin Life of the author was prefixed, written by Dr. Laurence.

Hay, camel's. See *Juncus odoratus.*

HEAD. *Caput.* The superior part of the body placed upon the neck, containing the cerebrum, cerebellum, and medulla oblongata. It is divided into the *face* and *hairy* part. On the latter is observed the *vertex*, or crown of the head; the *sinciput*, or fore part; the *occiput*, or hinder part. For the former, see *Face.* For the bones of the head, see *Skull.* The common integuments of the head are called the scalp.

HEARING. *Auditus.* This sense is placed, by physiologists, among the animal actions. It is a sensation by which we hear the sound of sonorous bodies. The organ of hearing is the soft portion of the auditory nerve which is distributed on the vestibule, semicircular canals and cochlea.

HEART. *Cor.* A hollow muscular viscus, situated in the cavity of the pericardium for the circulation of the blood. It is divided externally into a *base*, or its broad part; a *superior* and an *inferior surface*, and an *anterior* and *posterior* margin. Internally, it is divided into a *right* and *left ventricle.* The situation of the heart is oblique, not transverse; its base being placed on the right of the bodies of the vertebræ, and its apex obliquely to the sixth rib on the left side; so that the left ventricle is almost posterior, and the right anterior. Its inferior surface lies upon the diaphragm. There are two cavities adhering to the base of the heart, from their resemblance called *auricles.* The right auricle is a muscular sac, in which are four *apertures,* two of the venæ cavæ, an opening into the right ventricle, and the opening of the coronary vein. The left is a similar sac, in which there are five *apertures,* viz. those of the four pulmonary veins, and an opening into the left ventricle. The cavities in the heart are called *ventricles:* these are divided by a fleshy septum, called *septum cordis,* into a right and left. Each ventricle has two *orifices;* the one auricular, through which the blood enters, the other arterious, through which the blood passes out. These four orifices are supplied with *valves,* which are named from their resemblance; those at the arterious orifices are called the *semilunar;* those at the orifice of the right auricle, *tricuspid;* and those at the orifice of the left auricle, *mitral. The valve of Eustachius* is situated at the termination of the vena cava inferior, just within the auricle. The substance of the heart is muscular, its exterior fibres are longitudinal, its middle transverse, and its interior oblique. The internal superficies of the ventricles and auricles of the heart are invested with a strong and smooth membrane, which is extremely irritable. The vessels of the heart are divided into *common* and *proper.* The *common* are, 1. The *aorta,* which arises from the left ventricle. 2. The *pulmonary artery,* which originates from the right ventricle. 3. The four pulmonary veins, which terminate in the left auricle. 4. The two *venæ cavæ,* which evacuate themselves into the right auricle. The *proper vessels* are, 1. The *coronary arteries,* which arise from the aorta, and are distributed on the heart. 2. The *coronary veins,* which return the blood into the right auricle. The *nerves* of the heart are branches of the eighth and great intercostal pairs. The heart of the fœtus differs from that of the adult, in having a *foramen ovale,* through which the blood passes from the right auricle to the left.

Heart's ease. See *Viola tricolor.*

Heat. See *Caloric.*

Heat, absolute. This term is applied to the whole quantity of caloric existing in a body in chemical union.

Heat, animal. See *Animal heat.*

Heat, free. If the heat which exists in any substance be from any cause forced in some degree to quit that substance, and to combine with those that surround it, then such heat is said to be free, or sensible, until the equilibrium is restored.

Heat, latent. When any body is in equilibrium with the bodies which surround it with respect to its heat, that quantity which it contains is not perceptible by any external sign, or organ of sense, and is termed combined caloric, or latent heat.

Heat, sensible. See *Heat, free.*

Heavy carbonated hydrogen gas. See *Carburetted hydrogen gas.*

HEBERDEN, William, was born in London in 1710, and graduated at Cambridge, where he afterwards practised during ten years, and gave lectures on the Materia Medica. During this period he published a little Tract, entitled "Antitheriaca," condemning the complication of certain antient Formulæ of Medicines. In 1748 he removed to London, having previously been elected a Fellow of the College of Physicians; and he was shortly after admitted into the Royal Society. He soon rose to considerable reputation and practice in his profession. At his suggestion "the Medical Transactions of the College of Physicians," first appeared in 1768; and four other volumes have since been published at different periods. Dr. Heberden contributed some valuable papers to this work, especially on the Angina Pectoris, a disease not before described; and on Chicken Pox, which he first accurately distinguished from Small pox. Some other papers of his appeared in the Philosophical Transactions. As he advanced in years he began to relax from the fatigue of practice: and in 1782 he drew up the result of his experience in a volume of "Commentaries," written in elegant Latin. He had ever accustomed himself to take notes by the bedside of the patient, which he arranged every month; and from these documents he composed his work. He reserved it for publication, however, till after his death, which did not happen till 1801.

Hectic fever. (From ἑξις, habit.) See *Febris hectica.*

HE'DERA. (From *hæreo*, to stick, because it attaches itself to trees and old walls.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* The ivy.

He'dera arbo'rea. See *Hedera Helix.*

He'dera He'lix. *Hedera arborea.* The ivy. The leaves of this tree have little or no smell, but a very nauseous taste. Haller informs us, that they are recommended in Germany against the atrophy of children. By the common people of this country they are sometimes applied to running sores, and to keep issues open. The berries were supposed by the antients to have a purgative and emetic quality; and an extract was made from them by water, called by Quercetanus *extractum purgans.* Later writers have recommended them in small doses as alexipharmic and sudorific: it is said, that in the plague at London, the powder of them was given in vinegar, or white wine, with good success. It is from the stalk of this tree that a resinous juice called *Gummi hederæ,* exudes very plentifully in warm climates. It is imported from the East Indies, though it may be collected from trees in this country. It is brought over in hard compact masses, externally of a reddish-brown colour, internally of a bright brownish yellow, with reddish specks or veins. It has a strong, resinous, agreeable smell, and an adstringent taste. Though never used in the practice of the present day, it possesses corroborant, astringent and antispasmodic virtues.

He'dera terre'stris. See *Glecoma.*

Hedge hyssop. See *Gratiola.*

Hedge mustard. See *Erysimum officinale.*

Hedge mustard, stinking. See *Erysimum Alliaria.*

He'dra. The anus. Excrement. A fracture.

Hedyo'smos. Mint.

HEISTER, Laurence, was born at Frankfort on the Maine in 1683. After studying in different German universities, and serving some time as an army-surgeon, he graduated at Leyden; and in 1709 was appointed physician general to the Dutch Military Hospital. The next year he became professor of anatomy and surgery at Altorf: and having distinguished himself greatly by his lectures and writings, he received in 1720 a more advantageous appointment at Helmstadt, under the Duke of Brunswick, as physician, Aulic counsellor, and professor of Medicine; in which he continued, notwithstanding an invitation to Russia from the Czar Peter, till the period of his death in 1758. He was author of several esteemed works, particularly a Compendium of Anatomy, which became very popular, being remarkable for its conciseness and clearness. His "Institutions of Surgery" also gained him great credit; being translated into Latin, and most of the modern languages of Europe. Another valuable practical work was entitled "Medical, Surgical, and Anatomical Cases and Observations." He had some taste for Botany also, which he taught at Helmstadt, and considerably enriched the garden there; but he unfortunately became an antagonist of the celebrated Linnæus, not properly appreciating the excellence of the system of that eminent naturalist.

Helco′ma. Ulceration.

Helco′nia. (From ελκος, an ulcer.) An ulcer in the external or internal superficies of the cornea, known by an excavation and oozing of purulent matter from the cornea.

Helcy′drion. (From ελκος, an ulcer, and υδωρ, water.) *Helcydrium.* A moist ulcerous pustule.

Helcy′ster. (From ελκω, to draw.) An instrument for extracting the fœtus.

Hele′nium. (From *Helene*, the island where it grew.) See *Inula helenium.*

Helia′nthus tubero′sus. Jerusalem Artichoke. Although formerly in estimation for the table, this plant, *Helianthus tuberosus* of Linnæus, is now neglected, it being apt to produce flatulency and dyspepsia.

Helica′lis major. See *Helicis major.*

Helica′lis mi′nor. See *Helicis minor.*

HE′LICIS MA′JOR. A proper muscle of the ear, which depresses the part of the cartilage of the ear into which it is inserted; it lies upon the upper or sharp point of the helix, or outward ring, arising from the upper and acute part of the helix anteriorly, and passing to be inserted into its cartilage a little above the tragus.

HE′LICIS MI′NOR. A proper muscle of the ear, which contracts the fissure of the ear: it is situated below the helicis major, upon part of the helix. It arises from the inferior and anterior part of the helix, and is inserted into the crus of the helix, near the fissure in the cartilage opposite to the concha.

Heliotro′pii su′ccus. See *Croton tinctorium.*

HE′LIX. (Ελιξ, from ειλω, to turn about.) The external circle or border of the outer ear, that curls inwards.

HELLEBORA′STER. (From ελλεϐορος, hellebore. See *Helleborus fœtidus.*

Hellebore, black. See *Helleborus niger.*

Hellebore, white. See *Veratrum album.*

HELLE′BORUS. (Ελλεϐορος: παρα το τη βορα ελλειν, because it destroys, if eaten.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.* Hellebore.

Helle′borus albus. See *Veratrum album.*

Helle′borus fœ′tidus. *Helleboraster.* Stinking hellebore, or bear's foot. *Helleborus fœtidus, caule multifloro folioso, foliis pedatis,* of Linnæus. The leaves of this indigenous plant are recommended by many as possessing extraordinary anthelmintic powers. The smell of the recent plant is extremely fœtid, and the taste is bitter and remarkably acrid, insomuch that, when chewed, it excoriates the mouth and fauces. It commonly operates as a cathartic, sometimes as an emetic, and, in large doses, proves highly deleterious.

Helle′borus ni′ger. *Melampodium.* Black hellebore, or Christmas rose. *Helleborus niger, scapo subbiflore subnudo, foliis pedatis,* of Linnæus. The root of this exotic plant is the part employed medicinally: its taste, when fresh, is bitterish, and somewhat acrid: it also emits a nauseous acrid smell; but, being long kept, both its sensible qualities and medicinal activity suffer very considerable diminution. The antients esteemed it as a powerful remedy in maniacal cases. At present it is exhibited principally as an alterative, or, when given in a large dose, as a purgative. It often proves a very powerful emmenagogue in plethoric habits, where steel is ineffectual, or improper. It is also recommended in dropsies, and some cutaneous diseases.

Helmet-flower, yellow. See *Anthora.*

HELMI′NTHAGOGUES. (*Helminthagoga*; from ελμινς, a worm, and *αγω*, to drive out.) Medicines which destroy and expel worms. See *Anthelmintics.*

HELMINTHI′ASIS. (Ελμινθιασις, from ελμινς, which signifies any species of worm.) A disease in which worms, or the larvæ of worms, are bred under the skin, or some external part of the body. It is endemial to Martinique, Westphalia, Transylvania, and some other places.

Helminthoco′rton. See *Corallina corsicana.*

HELMONT, John Baptist Van, was born of a noble family at Brussels in 1577. He exhibited very early proofs of superior abilities, and soon became convinced how much hypothesis was ranked under the name of science and philosophy in books: he seems to have perceived the necessity of experiment and induction in the discovery of real knowledge; but did not methodize his ideas sufficiently, to pursue that plan with its full advantage. After taking his degree at Louvain he travelled during ten years, and in this period acquired some practical knowledge of chemistry. On his return in 1609 he married a noble lady of large fortune, which enabled him to pursue his researches into the three kingdoms of nature with little interruption. He declined visiting patients, but gave gratuitous advice to those, who went to consult him; and he boasts of having cured several thousands annually. He continued his investigations with astonishing diligence during thirty years, and made several discoveries in chemistry; among which were certain articles possessed of considerable activity on the human body. This confirmed his opposition to the Galenical school; the absurd hypotheses, and inert practice of which he attacked with great warmth and ability. Indeed he contributed greatly to overturn their influence; but from a desire to explain every thing on chemical principles, he substituted doctrines equally gratuitous or unintelligible. He published various works from time to time, which brought him considerable reputation, and he was repeatedly invited to Vienna; but he preferred continuing in his laboratory. He died in 1644.

Helo′des. (From ελος, a marsh.) A term applied to fevers generated from marsh miasma.

Helo′sis. (From ειλω, to turn.) An eversion or turning up of the eyelids.

He′lxine. (From ελκω, to draw; so called because it sticks to whatever it touches.) Pellitory of the wall.

Hemalo′pia. Corruptly written for hæmalopia.

Hematu′ria. See *Hæmaturia.*

HEMERALOPS. (From ημερα, the day, and ωψ, an eye.) One who can see but in the day-time.

HEMERALO′PIA. (From ημερα, the day, and ωψ, the eye.) A defect in the sight, which consists in being able to see in the day-time, but not in the evening. The following is Scarpa's description of this curious disorder. Hemeralopia, or *nocturnal blindness,* is properly nothing but a kind of imperfect periodical amaurosis, most commonly sympathetic with the stomach. Its paroxysms come on towards the evening, and disappear in the morning. The disease is endemic in some countries, and epidemic, at certain seasons of the year, in others. At sun set, objects appear to persons affected with this complaint as if covered with an ash-coloured veil, which gradually changes into a dense cloud, which intervenes between the eyes and surrounding objects. Patients with hemeralopia, have the pupil, both in the day and night time, more dilated, and less moveable than it usually is in healthy eyes. The majority of them, however, have the pupil more or less moveable in the day time, and always expanded and motionless at night. When brought into a room faintly lighted by a candle, where all the bystanders can see tolerably well, they cannot discern at all, or in a very feeble manner, scarcely any one object; or they only find themselves able to distinguish light from darkness, and at moon-light their sight is still worse. At day-break they recover their sight, which continues perfect all the rest of the day till sun-set.

Hemicerau′nios. (From ημισυς, half, and κειρω, to cut; so called because it was cut half way down.) A bandage for the back and breast.

HEMICRA′NIA. (From ημισυς, half, and κρανιον, the head.) A pain that affects only one side of the head.

Hemicra′nia cla′vus. Pain resembling the driving a nail into the head.

Hemio′psia. (From ημισυς, half, and ωψ, an eye.) A defect of vision, in which the person sees the half, but not the whole of an object.

Hemipa′gia. (From ημισυς, half, and παγιος, fixed.) A fixed pain on one side of the head.

HEMIPLE′GIA. (From ημισυς, half, and πλησσω, to strike.) A paralytic affection of one side of the body. See *Paralysis.*

Hemlock. See *Conium.*

Hemlock-dropwort. See *Oenanthe.*

Hemlock, water. See *Cicuta virosa.*

Hemorrhage from the lungs. See *Hæmoptysis.*

Hemorrhage from the nose. See *Epistaxis.*

Hemorrhage from the stomach. See *Hæmatemesis.*

Hemorrhage from the urinary organs. See *Hæmaturia.*

Hemorrhage from the uterus. See *Menorrhagia.*

Hemp. See *Cannabis.*

Hemp-agrimony. See *Eupatorium.*

Hemp, water. See *Eupatorium.*

Henbane. See *Hyoscyamus.*

HE′PAR. (ηπαρ, the liver.) See *Liver.*

He′par sulphuris. Liver of sulphur. This is a *sulphuret* made either with potash or soda. It has a disagreeable fœtid smell, but is in high esteem with some as a medicine to decompose corrosive sublimate, when taken into the stomach. See *Sulphuretum potassæ.*

He′par uteri′num. The placenta.

HEPATA′LGIA. (From ηπαρ, the liver, and αλγος, pain.) Pain in the liver.

HEPA′TIC. Any thing belonging to the liver.

Hepa′tic air. Sulphuretted hydrogen gas. Hepatic airs consist of inflammable air combined with sulphur, which exists in very different proportions. See *Hydrogen gas, sulphuretted.*

HEPA′TIC ARTERY. *Arteria hepatica.* The artery which nourishes the substance of the liver. It arises from the cœliac, where it almost touches the point of the *lobulus Spigelii.* Its root is covered by the pancreas; it then turns a little forwards, and passes under the pylorus to the porta of the liver, and runs betwixt the biliary ducts and the vena portæ, where it divides into two large branches, one of which enters the right, and the other the left lobe of the liver. In this place it is enclosed along with all the other vessels in the capsule of Glisson.

HEPA′TIC DUCT. *Ductus hepaticus.* The trunk of the biliary pores. It runs from the sinus of the liver towards the duodenum, and is joined by the cystic duct, to form the ductus communis choledochus. See *Biliary duct.*

HEPA′TIC VEINS. See *vein,* and *Vena portæ.*

Hepa′tica. (From ηπαρ, the liver; so

called because it was thought to be useful in diseases of the liver.) The herb liverwort. See *Marchantia polymorpha*.

Hepa'tica nobilis. Herb trinity. See *Anemone hepatica*.

Hepa'tica terre'stris. See *Marchantia polymorpha*.

HEPATIRRHÆ'A. (From ηπαρ, the liver, and ρεω, to flow.) A diarrhœa, in which portions of flesh, like liver, are voided.

HEPATI'TIS. (From ηπαρ, the liver.) *Inflammatio hepatis*. An inflammation of the liver. A genus of disease in the class *pyrexiæ*, and order *phlegmasiæ* of Cullen, who defines it "febrile affection, attended with tension and pain of the right hypochondrium, often pungent, like that of a pleurisy, but more frequently dull, or obtuse, a pain at the clavicle and at the top of the shoulder of the right side; much uneasiness in lying down on the left side; difficulty of breathing; a dry cough, vomiting, and hiccough."

Hepatitis has generally been considered of two kinds; one the *acute*, the other *chronic*.

Besides the causes producing other inflammations, such as the application of cold, external injuries from contusions, blows, &c. this disease may be occasioned by certain passions of the mind, by violent exercise, by intense summer heats, by long continued intermittent and remittent fevers, and by various solid concretions in the substance of the liver. In warm climates this viscus is more apt to be affected with inflammation than perhaps any other part of the body, probably from the increased secretion of bile which takes place when the blood is thrown on the internal parts, by an exposure to cold; or from the bile becoming acrid, and thereby exciting an irritation in the part.

The *acute* species of hepatitis comes on with a pain in the right hypochondrium, extending up to the clavicle and shoulder; which is much increased by pressing upon the part, and is accompanied with a cough, oppression of breathing, and difficulty of lying on the left side; together with nausea and sickness, and often with a vomiting of bilious matter. The urine is of a deep saffron colour, and small in quantity; there is loss of appetite, great thirst, and costiveness, with a strong, hard, and frequent pulse; and when the disease has continued for some days, the skin and eyes become tinged of a deep yellow.

The *chronic* species is usually accompanied with a morbid complexion, loss of appetite and flesh, costiveness, indigestion, flatulency, pains in the stomach, a yellow tinge of the skin and eyes, clay-coloured stools, high-coloured urine, depositing a red sediment and ropy mucus; an obtuse pain in the region of the liver, extending to the shoulder, and not unfrequently with a considerable degree of asthma.

These symptoms are, however, often so mild and insignificant as to pass almost unnoticed; as large abscesses have been found in the liver, upon dissection, which in the person's life-time had created little or no inconvenience, and which we may presume to have been occasioned by some previous inflammation.

Hepatitis, like other inflammations, may end in resolution, suppuration, gangrene, or scirrhus; but its termination in gangrene is a rare occurrence.

The disease is seldom attended with fatal consequences of an immediate nature, and is often carried off by hæmorrhage from the nose, or hæmorrhoidal vessels, and likewise by sweating, by a diarrhœa, or by an evacuation of urine, depositing a copious sediment. In a few instances, it has been observed to cease on the appearance of erysipelas, in some external part.

When suppuration takes place, as it generally before this forms an adhesion with some neighbouring part, the pus is usually discharged by the different outlets with which this part is connected, as by coughing, vomiting, purging, or by an abscess breaking outwardly; but, in some instances, the pus has been discharged into the cavity of the abdomen, where no such adhesion had been formed.

On dissection, the liver is often found much enlarged, and hard to the touch; its colour is more of a deep purple than what is natural, and its membranes are more or less affected by inflammation. Dissections likewise show that adhesions to the neighbouring parts often take place, and large abscesses, containing a considerable quantity of pus, are often found in its substance.

The treatment of this disease must be distinguished, as it is of the acute, or of the chronic form. In acute hepatitis, where the symptoms run high, and the constitution will admit, we should, in the beginning, bleed freely from the arm; which it will seldom be necessary to repeat, if carried to the proper extent at first: in milder cases, or where there is less power in the system, the local abstraction of blood, by cupping or leeches, may be sufficient. We should next give calomel alone, or combined with opium, and followed up by infusion of senna with neutral salts, jalap, or other cathartic, to evacuate bile, and thoroughly clear out the intestines. When, by these means, the inflammation is materially abated, we should endeavour to promote diaphoresis by suitable medicines, assisted by the warm bath; a blister may be applied; and the antiphlogistic regimen is to be duly enforced. But the discharge of bile, by occasional doses of calomel, must not be neglected; and where the alvine evacuations are deficient in that secretion, it will be proper to push this, or other mercurial preparation, till the mouth is in some measure affected. In India this is the remedy chiefly relied upon, and exhibited often in much larger doses than appear advisable in more temperate climates. Should the disease proceed to suppuration, means must be used to support the strength; a nutritious diet, with a moderate quantity of wine, and decoction of bark, or other tonic medicine: fomentations or poultices will also be proper to promote the discharge externally; but when any fluctuation is perceptible, it is better to make an opening, lest it should burst inwardly. In the chronic form of the disease mercury is the remedy chiefly to be relied upon; but due caution must be observed in its use, especially in scrophulous subjects. It appears more effectual in restoring the healthy action of the liver, when taken internally: but if the mildest forms, though guarded by opium, or other sedative, cannot so be borne, the ointment may be rubbed in. In the mean time calumba, or other tonic, with antacids, and mild aperients, as rhubarb, to regulate the state of the primæ viæ, will be proper. Where the system will not admit the adequate use of mercury, the nitric acid is the most promising substitute. An occasional blister may be required to relieve unusual pain; or where this is very limited and continued, an issue, or seton may answer better. The strength must be supported by a light nutritious diet; and gentle exercise with warm clothing, to maintain the perspiration steadily, is important, in the convalescent state: more especially a sea voyage in persons long resident in India has often appeared the only means of restoring perfect health.

Hepati′tis cy′stica. Inflammation of the gall bladder.

Hepati′tis parenchymato′sa. Inflammation in the inner substance of the liver.

Hepati′tis peritonæa′lis. Inflammation in the peritonæum covering the liver.

HEPATOCE′LE. (From ηπαρ, the liver, and κηλη, a tumour.) An hernia, in which a portion of the liver protrudes through the abdominal parietes.

Hepato′rium. The same as *Eupatorium.*

Hepatule. See *Hydrogen gas, sulphuretted.*

Hephæ′stias. (From Ηφαιϛος, Vulcan, or fire.) A drying plaster of burnt tiles.

Hepi′alus. (From ηπιος, gentle.) A mild quotidian fever.

Heptapha′rmacum. (From επτα, seven, and φαρμακον, medicine.) A medicine composed of seven ingredients. the principal of which were cerusse, litharge, wax, &c.

Heptaphy′llum. (From επτα, seven, and φυλλον, a leaf; so named because it consists of seven leaves.) See *Tormentilla.*

Heptaple′urum. (From επτα, seven, and πλευρα, a rib; so named from its having seven ribs upon the leaf.) The herb plantain.

Hera′clea. (From *Heraclea*, the city near which it grows.) Water horehound.

Hera′cleum spondy′lium. *Branca ursina Germanica. Spondylium.* Cow-parsnep. All-heal. The plant which is directed by the name of branca ursina in foreign pharmacopœias, is the *Heracleum spondylium, foliolis pinnatifidis, lævibus: floribus uniformibus* of Linnæus. In Siberia it grows extremely high, and appears to have virtues in the cure of dysentery, which the plants of this country do not possess.

Herba brita′nnica. See *Rumex Hydrolapathum.*

Herba sa′cra. See *Verbena.*

Herb-bennet. See *Geum urbanum.*

Herb-mastich. See *Thymus mastichina.*

Herb-of-grace. See *Gratiola.*

Herb trinity. See *Anemone Hepatica.*

Hercules's all-heal. See *Laserpitium chironium.*

He′rcules bo′vii. Gold and mercury dissolved in a distillation of copperas, nitre, and sea-salt. Violently cathartic.

HERE′DITARY DISEASE. (From *hæres*, a heir.) A disease which is continued from parents to their children.

HERMA′PHRODITE. (From Ἑρμης, Mercury, and Αφροδιτη, Venus, *i. e.* partaking of both sexes.) The true hermaphrodite of the antients was, the man with male organs of generation, and the female stature of body, that is, narrow chest and large pelvis; or the woman with female organs of generation, and the male stature of body, that is, broad chest and narrow pelvis. The term is now, however, used to express any *lusus naturæ* wherein the parts of generation appear to be a mixture of both sexes.

Herme′tic. (From Ερμης, Mercury.) In the language of the antient chemists, Hermes was the father of chemistry, and the Hermetic seal was the closing the end of a glass vessel while in a state of fusion, according to the usage of chemists.

Hermodactyl. See *Hermodactylus.*

HERMODA′CTYLUS. (Ερμοδακτυλος, Etymologists have always derived this word from Ερμης, Mercury, and δακτυλος, a finger. It is, however, probably named from *Hermus*, a river in Asia, upon whose banks it grows, and δακτυλος, a date, which it is like.) The root of a species of colchicum, not yet ascertained, but supposed to be the *Colchicum illyricum* of Linnæus, of the shape of a heart, flattened on one side, with a furrow on the other, of a white colour, compact and solid, yet easy to cut or powder. This root, which has a viscous, sweetish, farinaceous taste, and no remarkable smell, is imported from Turkey. Its use is totally laid aside in the practice of the present day. Formerly the roots were esteemed as cathartics, which power is wanting in those that reach this country.

HE'RNIA. (From ερνος, a branch; from its protruding out of its place.) A rupture. Surgeons understand, by the term *hernia,* a tumour formed by the protrusion of some of the viscera of the abdomen out of that cavity into a kind of sac, composed of the portion of peritoneum, which is pushed before them. However, there are certainly some cases which will not be comprehended in this definition; either because the parts are not protruded at all, or have no hernial sac, as the reader will learn in the course of this article.

The places in which these swellings most frequently make their appearance, are the groin, the navel, the labia pudendi, and the upper and fore-part of the thigh; they do also occur at every point of the anterior part of the abdomen; and there are several less common instances, in which hernial tumours present themselves at the foramen ovale, in the perineum, in the vagina, at the ischiatic notch, &c.

The parts which, by being thrust forth from the cavity, in which they ought naturally to remain, mostly produce herniæ, are either a portion of the omentum, or a part of the intestinal canal, or both together. But the stomach, the liver, the spleen, uterus, ovaries, bladder, &c. have been known to form the contents of some hernial tumours.

From these two circumstances of situation and contents, are derived all the different appellations by which herniæ are distinguished. If a portion of intestine only forms the contents of the tumour, it is called *enterocele;* if a piece of omentum only, *epiplocele;* and if both intestine and omentum contribute to the formation of a tumour, it is called *entero-epiplocele.* When the contents of a hernia are protruded at the abdominal ring, but only pass as low as the groin, or labium pudendi, the case receives the name of *bubonocele,* or *inguinal hernia;* when the parts descend into the scrotum, it is called an *oscheocele,* or *scrotal hernia.* The *crural,* or *femoral hernia,* is the name given to that which takes place below Poupart's ligament. When the bowels protrude at the navel, the case is named an *exomphalos,* or *umbilical hernia;* and *ventral* is the epithet given to the swelling, when it occurs at any other promiscuous part of the front of the abdomen. The *congenital rupture,* is a very particular case, in which the protruded viscera are not covered with a common hernial sac of peritoneum, but are lodged in the cavity of the tunica vaginalis, in contact with the testicle; and, as must be obvious, it is not named, like herniæ in general, from its situation, or contents, but from the circumstance of its existing from the time of birth.

When the hernial contents lie quietly in the sac, and admit of being readily put back into the abdomen, it is termed a *reducible hernia:* and when they suffer no constriction, yet cannot be put back, owing to adhesions, or their large size in relation to the aperture, through which they have to pass, the hernia is termed *irreducible.* An *incarcerated,* or *strangulated* hernia, signifies one which not only cannot be reduced, but suffers constriction: so that, if a piece of intestine be protruded, the pressure to which it is subjected stops the passage of its contents onward towards the anus, makes the bowel inflame, and brings on a train of most alarming and often fatal consequences.

The general symptoms of a hernia, which is reducible and free from strangulation, are—an indolent tumour at some point of the parietes of the abdomen; most frequently descending out of the abdominal ring, or from just below Poupart's ligament, or else out of the navel; but occasionally from various other situations. The swelling mostly originates suddenly, except in the circumstances above related; and it is subject to a change of size, being smaller when the patient lies down upon his back, and larger when he stands up, or draws in his breath. The tumour frequently diminishes when pressed, and grows large again when the pressure is removed. Its size and tension often increase after a meal, or when the patient is flatulent. Patients with hernia, are apt to be troubled with colic, constipation, and vomiting, in consequence of the unnatural situation of the bowels. Very often, however, the functions of the viscera seem to suffer little or no interruption.

If the case be an *enterocele,* and the portion of the intestine be small, the tumour is small in proportion; but though small, yet, if the gut be distended with wind, inflamed, or have any degree of stricture made on it, it will be tense, resist the impression of the finger, and give pain upon being handled. On the contrary, if there be no stricture, and the intestine suffers no degree of inflammation, let the prolapsed piece be of what length it may, and the tumour of whatever size, yet the tension will be little, and no pain will attend the handling it; upon the patient's coughing, it will feel as if it was blown into; and, in general, it will be found very easily returnable. A guggling noise is often made when the bowel is ascending.

If the hernia be an *epiplocele,* or one of the omental kind, the tumour has a more flabby and a more unequal feel; it is in general perfectly indolent, is more compressible, and (if in the scrotum) is more oblong and less round than the swelling occasioned in the same situation by an intestinal hernia; and, if the quantity be large, and the patient an adult, it is, in some measure, distinguishable by its greater weight.

If the case be an *entero-epiplocele*, that is, one consisting of both intestine and omentum, the characteristic marks will be less clear than in either of the simple cases; but the disease may easily be distinguished from every other one, by anybody in the habit of making the examination.

HE'RNIA CE'REBRI. *Fungus cerebri.* This name is given to a tumour which every now and then rises from the brain, through an ulcerated opening in the dura mater, and protrudes through a perforation in the cranium, made by the previous application of the trephine.

HE'RNIA CONGE'NITA. (So called because it is, as it were, born with the person.) This species of hernia consists in the adhesion of a protruded portion of intestine or omentum to the testicle, after its descent into the scrotum. This adhesion takes place while the testicle is yet in the abdomen. Upon its leaving the abdomen, it draws the adhering intestine, or omentum, along with it into the scrotum, where it forms the hernia congenita.

From the term *congenital,* we might suppose that this hernia always existed at the time of birth. The protrusion, however, seldom occurs till after this period, on the operation of the usual exciting causes of hernia in general. The congenital hernia does not usually happen till some months after birth; in some instances not till a late period. Mr. Hey relates a case, in which a hernia congenita was first formed in a young man, aged sixteen, whose right testis had, a little while before the attack of the disease, descended into the scrotum. It seems probable that, in cases of hernia congenita, which actually take place when the testicle descends into the scrotum before birth, the event may commonly be referred, as observed above, to the testicle having contracted an adhesion to a piece of intestine, or of the omentum, in its passage to the ring. Wrisberg found one testicle which had not passed the ring, adhering, by means of a few slender filaments, to the omentum, just above this aperture, in an infant that died a few days after birth.

Excepting the impossibility of feeling the testicle in hernia congenita, as we can in most cases of bubonocele, (which criterion Mr. Samuel Cooper, in his Surgical Dictionary, observes Mr. Pott should have mentioned,) the following account is very excellent. "The appearance of a hernia, in very early infancy, will always make it probable that it is of this kind; but in an adult, there is no reason for supposing his rupture to be of this sort, but his having been afflicted with it from his infancy; there is no external mark, or character, whereby it can be certainly distinguished from the one contained in a common hernial sac; neither would it be of any material use in practice, if there was."

HE'RNIA CRURA'LIS. Femoral hernia. The parts composing this kind of hernia, are always protruded under Poupart's ligament, and the swelling is situated towards the inner part of the bend of the thigh. The rupture descends on the side of the femoral artery and vein, between these vessels and the os pubis. Females are particularly subject to this kind of rupture in consequence of the great breadth of their pelvis, while in them the inguinal hernia is rare. It has been computed, that nineteen out of twenty married women, afflicted with hernia, have this kind; but that not one out of an hundred unmarried females, or out of the same number of men, have this form of the disease. The situation of the tumour makes it liable to be mistaken for an enlarged inguinal gland; and many fatal events are recorded to have happened from the surgeon's ignorance of the existence of the disease. A gland can only become enlarged by the gradual effects of inflammation; the swelling of a crural hernia comes on in a momentary and sudden manner; and, when strangulated, occasions the train of symptoms described in the account of the hernia incarcerata, which symptoms an enlarged gland could never occasion. Such circumstances seem to be sufficiently discriminative; though the feel of the two kinds of swelling is often not in itself enough to make the surgeon decided in his opinion. A femoral hernia may be mistaken for a bubonocele, when the expanded part of the swelling lies over Poupart's ligament. As the taxis and operation for the first case ought to be done differently from those for the latter, the error may lead to very bad consequences. The femoral hernia, however, may always be discriminated, by the neck of the tumour having Poupart's ligament above it. In the bubonocele, the angle of the pubes is behind and below this part of the sac; but in the femoral hernia, it is on the same horizontal level, a little on the inside of it.

Until very lately, the stricture, in cases of femoral hernia, was always supposed to be produced by the lower border of the external oblique muscle, or, as it is termed, Poupart's ligament. A total change of surgical opinion on this subject has, however, latterly taken place, in consequence of the accurate observations first made in 1768, by Gimbernat, surgeon to the king of Spain. In the crural hernia, (says he,) the aperture through which the parts issue is not formed by two bands, (as in the inguinal hernia,) but it is a foramen, almost round, proceeding from the internal margin of the crural arch, (Poupart's ligament,) near its insertion into the branch of the os pubis, between the bone and the iliac vein, so that in this hernia, the branch of the os pubis, is situated more internally than the intestine, and a little behind; the vein externally, and behind; and the internal border of the arch before. Now it is this border which always forms the strangulation.

He'rnia flatule'nta. A swelling of the side, caused by air that has escaped through the pleura.

He'rnia gu'tturis. Bronchocele, or tumour of the bronchial gland.

HE'RNIA HUMO'RALIS. *Inflammatio testis. Orchitis.* Swelled testicle. A very common symptom, attending a gonorrhœa, is a swelling of the testicle, which is only sympathetic, and not venereal, because the same symptoms follow every kind of irritation on the urethra, whether produced by strictures, injections, or bougies. Such symptoms are not similar to the actions arising from the application of venereal matter, for suppuration seldom occurs, and, when it does, the matter is not venereal. The swelling and inflammation appear suddenly, and as suddenly disappear, or go from one testicle to the other. The epididymis remains swelled, however, even for a considerable time afterwards.

The first appearance of swelling is generally a soft pulpy fulness of the body of the testicle, which is tender to the touch; this increases to a hard swelling, accompanied with considerable pain. The epididymis, towards the lower end of the testicle, is generally the hardest part. The hardness and swelling, however, often pervade the whole of the epididymis. The spermatic cord, and especially the vas deferens, are often thickened, and sore to the touch. The spermatic veins sometimes become varicose. A pain in the loins, and sense of weakness there, and in the pelvis, are other casual symptoms. Colicky pains; uneasiness in the stomach and bowels; flatulency; sickness, and even vomiting; are not unfrequent. The whole testicle is swelled, and not merely the epididymis, as has been asserted.

The inflammation of the part most probably arises from its sympathising with the urethra. The swelling of the testicle coming on, either removes the pain in making water, and suspends the discharge, which does not return till such swelling begins to subside, or else the irritation in the urethra, first ceasing, produces a swelling of the testicle, which continues till the pain and discharge return; thus rendering it doubtful which is the cause and which the effect. Occasionally, however, the discharge has become more violent, though the testicle has swelled; and such swelling has even been known to occur after the discharge has ceased; yet the latter has returned with violence, and remained as long as the hernia humoralis.

Hernia humoralis, with stoppage of the discharge, is apt to be attended with strangury. A very singular thing is, that the inflammation more frequently comes on when the irritation in the urethra is going off, than when at its height.

The enlargements of the testicle, from cancer and scrophula, are generally slow in their progress; that of an hernia humoralis very quick.

HE'RNIA INCARCERA'TA. Incarcerated hernia. Strangulated hernia, or a hernia with stricture. The symptoms are a swelling in the groin, &c. resisting the impression of the fingers. If the hernia be of the intestinal kind, it is generally painful to the touch, and the pain is increased by coughing, sneezing, or standing upright. These are the very first symptoms; and, if they are not relieved, are soon followed by others; viz. a sickness at the stomach, a frequent retching, or inclination to vomit, a stoppage of all discharge per anum, attended with frequent hard pulse, and some degree of fever. These are the first symptoms; and if they are not appeased by the return of the intestine, that is, if the attempts made for this purpose do not succeed, the sickness becomes more troublesome, the vomiting more frequent, the pain more intense, the tension of the belly greater, the fever higher, and a general restlessness comes on, which is very terrible to bear. When this is the state of the patient, no time is to be lost; a very little delay is now of the utmost consequence; and if the one single remedy which the disease is now capable of, be not administered immediately, it will generally baffle every other attempt. This remedy is the operation whereby the parts engaged in the stricture may be set free. If this be not now performed, the vomiting is soon exchanged for a convulsive hiccough, and a frequent gulping up of bilious matter; the tension of the belly, the restlessness and fever, having been considerably increased for a few hours, the patient suddenly becomes perfectly easy, the belly subsides, the pulse, from having been hard, full and frequent, becomes low, languid, and generally interrupted; and the skin, especially that of the limbs, cold and moist; the eyes have now a languor and glassiness, a lack lustre not easy to be described: the tumour of the part disappears, and the skin covering it sometimes changes its natural colour for a livid hue; but whether it keeps or loses its colour, it has an emphysematous feel, a crepitus to the touch, which will easily be conceived by all who have attended to it, but is not easy to convey an idea of by words. This crepitus is the too sure indicator of gangrenous mischief within. In this state, the gut either goes up spontaneously, or is returned with the smallest degree of pressure; a discharge is made by stool, and the patient is generally much pleased at the ease he finds; but this pleasure is of short duration, for the hiccough and the cold sweats continuing and increasing, with the addition of spasmodic rigors and subtultus tendinum, the tragedy soon finishes.

HE'RNIA INGUINA'LIS. *Bubonocele.* Inguinal hernia. *The hernia inguinalis* is so called because it appears in both sexes at the groin. It is one of the divisions of hernia, and includes all those herniæ in which the parts displaced pass out of the abdomen through the ring, that is, the arch formed by the aponeurosis of the musculus obliquus externus in the groin, for the passage of the spermatic vessels in men, and the round ligament in women. The parts displaced that form the hernia, the part into which they fall, the manner of the hernia being produced, and the time it has continued, occasion great differences in this disorder. There are three different parts that may produce a hernia in the groin, viz. one or more of the intestines, the epiploon, and the bladder. That which is formed by one or more of the intestines, was called, by the antients, *enterocele.* The intestine which most frequently produces the hernia, is the *ilium:* because, being placed in the iliac region, it is nearer the groin than the rest; but notwithstanding the situation of the other intestines, which seems not to allow of their coming near the groin, we often find the jejunum, and frequently also a portion of the colon and cæcum, included in the hernia. It must be remembered, that the mesentery and mesocolon are membranous substances, capable of extension, which, by little and and little, are sometimes so far stretched by the weight of the intestines, as to escape with the ilium, in this species of hernia. The hernia made by the epiploon, is called *epiplocele;* as that caused by the epiploon and any of the intestines together, is called *entero epiplocele.* The hernia of the bladder is called *crystocele.* Hernia of the bladder is uncommon, and has seldom been known to happen but in conjunction with some of the other viscera. When the parts, having passed through the abdominal rings, descend no lower than the groin, it is called an incomplete hernia; when they fall into the scrotum in men, or into the *labia pudendi* in women, it is then termed complete.

The marks of discrimination between some other diseases and inguinal herniæ are these: —

The disorders in which a mistake may possibly be made, are the circocele, bubo, hydrocele, and hernia humoralis, or inflamed testicle.

For an account of the manner of distinguishing circocele from a bubonocele, see *Circocele.*

The circumscribed incompressible hardness, the situation of the tumour, and its being free from all connection with the spermatic process, will sufficiently point out its being a bubo, at least while it is in a recent state; and when it is in any degree suppurated, he must have a very small share of the *tactus eruditus* who cannot feel the difference between matter, and either a piece of intestine or omentum.

The perfect equality of the whole tumour, the freedom and smallness of the spermatic process above it, the power of feeling the spermatic vessels, and the vas deferens in that process; its being void of pain upon being handled, the fluctuation of the water, the gradual formation of the swelling, its having begun below and proceeded upwards, its not being affected by any posture or action of the patient, nor increased by his coughing or sneezing, together with the absolute impossibility of feeling the testicle at the bottom of the scrotum, will always, to an intelligent person, prove the disease to be hydrocele.

Mr. Pott, however, allows that there are some exceptions in which the testicle cannot be felt at the bottom of the scrotum, in cases of hernia. In recent bubonoceles, while the hernial sac is thin, has not been long, or very much distended, and the scrotum still preserves a regularity of figure, the testicle may almost always be easily felt at the inferior and posterior part of the tumour. But in old ruptures, which have been long down, in which the quantity of contents is large, the sac considerably thickened, and the scrotum of an irregular figure, the testicle frequently cannot be felt; neither is it in general easily felt in the *congenital hernia*, for obvious reasons.

In the *hernia humoralis*, the pain in the testicle, its enlargement, the hardened state of the epididymis, and the exemption of the spermatic cord from all unnatural fulness, are such marks as cannot easily be mistaken; not to mention the generally preceding gonorrhœa. But if any doubt still remains of the true nature of the disease, the progress of it from above downwards, its different state and size in different postures, particularly lying and standing, together with its descent and ascent, will, if duly attended to, put it out of all doubt that the tumour is a *true hernia.*

When an inguinal hernia does not descend through the abdominal ring, but only into the canal for the spermatic cord, it is covered by the aponeurosis of the external oblique muscle, and the swelling is small and undefined.

Now and then, the testicle does not descend into the scrotum till a late period. The first appearance of this body at the ring, in order to get into its natural situation, might be mistaken for that of a hernia, were the surgeon not to pay attention to the absence of the testicle from the scrotum, and the peculiar sensation occasioned by pressing the swelling.

HE'RNIA ISCHIA'TICA. A rupture at the ischiatic notch. This is very rare. A case, however, which was strangulated, and undiscovered till after death, is related in Mr. A. Cooper's second part of his work on hernia. The disease happened in a young man aged 27. On opening the abdomen, the ilium was found to have descended on the right side of the rectum into the pelvis; and a fold of it was protruded into a small sac, which passed out of the pelvis at the ischiatic notch. The intestine was adherent to the sac at two points: the strangulated part, and about three inches on each side were very black. The intestines towards the stomach, were very much distended with air, and here and there had a livid spot on them. A dark spot was even found on the stomach itself, just above the pylorus. The colon was exceedingly contracted, as far as its sigmoid flexure. A small orifice was found in the side of the pelvis, in front of, but a little above the sciatic nerve, and on the fore part of the pyriformis muscle. The sac lay under the glutæus maximus muscle, and its orifice was before the internal iliac artery, below the obturator artery, but above the vein.

He'rnia intestina'lis. See *Hernia inguinalis.*

He'rnia lachryma'lis. When the tears pass through the puncta lachrymalia, but stagnate in the sacculus lachrymalis, the tumour is styled *hernia lachrymalis* with little propriety or precision. It is with equal impropriety called, by Anel, *a dropsy of the lachrymal sac.*

If the inner angle of the eye is pressed, and an aqueous humour flows out, the disease is the *fistula lachrymalis.*

HE'RNIA MESENTE'RICA. Mesenteric hernia. If one of the layers of the mesentery be torn by a blow, while the other remains in its natural state, the intestines may insinuate themselves into the aperture and form a kind of hernia. The same consequences may result from a natural deficiency in one of these layers. Mr. A. Cooper relates a case, in which all the small intestines, except the duodenum, were thus circumstanced. The symptoms during life were unknown.

HE'RNIA MESOCO'LICA. Mesocolic hernia. So named by Mr. A. Cooper, when the bowels glide between the layers of the mesocolon. Every surgeon should be aware that the intestines may be strangulated from the following causes: 1. Apertures in the omentum, mesentery, or mesocolon, through which the intestine protrudes. 2. Adhesions, leaving an aperture, in which a piece of intestine becomes confined. 3. Membranous bands at the mouths of hernial sacs, which becoming elongated by the frequent protrusion and return of the viscera, surround the intestine, so as to strangulate them within the abdomen when returned from the sac.

HE'RNIA OMENTA'LIS. *Epiplocele.* A rupture of the omentum; or a protrusion of the omentum through apertures in the integuments of the belly. Sometimes, according to Mr. Sharpe, so large a quantity of the omentum hath fallen into the scrotum that its weight, drawing the stomach and bowels downwards, hath excited vomiting, inflammation, and symptoms similar to those of the bubonocele.

HE'RNIA PERINEA'LIS. Perineal hernia. In men, the parts protrude between the bladder and rectum; in women, between the rectum and vagina. The hernia does not project so as to form an external tumour; and, in men, its existence can only be distinguished by examining in the rectum. In women, it may be detected both from this part and the vagina.

HE'RNIA PHRE'NICA. Phrenic hernia. The abdominal viscera are occasionally protruded through the diaphragm, either through some of the natural apertures in this muscle, or deficiencies, or wounds and lacerations in it. The second kind of case is the most frequent. Morgagni furnishes an instance of the first. Two cases related by Dr. Macauley, and two others published by Mr. A. Cooper, are instances of the second sort. And another case has been lately recorded by the latter gentleman, affording an example of the third kind. Hildanus, Parè, Petit, Schenck, &c. also mention cases of phrenic hernia.

HE'RNIA PUDENDA'LIS. Pudendal hernia. This is the name assigned by Mr. A. Cooper, to that which descends between the vagina and ramus ischii, and forms an oblong tumour in the labium, traceable within the pelvis, as far as the os uteri. Mr. C. thinks this case has sometimes been mistaken for a hernia of the foramen ovale.

HE'RNIA SCROTA'LIS. *Hernia oschealis. Hernia enteroscheocele. Oscheocele.* Paracelsus calls it *crepatura.* When the omentum, the intestine, or both, descend into the scrotum, it has these appellations; when the omentum only, it is called *epiploscheocele.* It is styled a perfect rupture in contradistinction to a bubonocele, which is the same disorder; but the descent is not so great. The hernia scrotalis is distinguished into the true and false; in the former, the omentum or intestine, or both, fall into the scrotum; in the latter, an inflammation, or a fluid, causes a tumour in this part, as in hernia humoralis, or hydrocele. Sometimes sebaceous matter is collected in the scrotum; and this hernia is called *steatocele.*

HE'RNIA THYROIDEA'LIS. *Hernia foraminis ovalis.* Thyroideal hernia. In the anterior and upper part of the obturator ligament there is an opening, through which the obturator artery, vein, and nerve proceed, and through which occasionally a piece of omentum or intestine is protruded, covered with a part of the peritoneum, which constitutes the hernial sac.

HE'RNIA UMBILICA'LIS. *Epiploomphalon. Omphalocele. Exomphalos. Omphalos,* and when owing to flatulency, *Pneumatomphalos.* The exomphalos, or umbilical rupture, is so called from its situation, and has (like other herniæ) for its general contents, a portion of intestine, or omentum, or both. In old umbilical ruptures, the quantity of omentum is sometimes very great. Mr. Ranby says, that he found two ells and a half of intestine in one of these, with about a third part of the stomach, all adhering together.

Mr. Gay and Mr. Nourse found the liver in the sac of an umbilical hernia; and Bohnius says that he did also.

But whatever are the contents, they are originally contained in the sac, formed by the protrusion of the peritoneum.

In recent and small ruptures, this sac is very visible; but in old and large ones, it is broken through at the knot of the navel, by the pressure and weight of the contents, and is not always to be distinguished; which is the reason why it has by some been doubted whether this kind of rupture has a hernial sac or not.

Infants are very subject to this disease, in a small degree, from the separation of the funiculus; but in general they either get rid of it as they gather strength, or are easily cured by wearing a proper bandage. It is of still more consequence to get this disorder cured in females, than in males; that its return, when they are become adult and pregnant, may be prevented as much as possible; for at this time it often happens, from the too great distension of the belly, or from unguarded motion, when the parts are upon the stretch.

Dr. Hamilton has met with about two cases annually for the space of seventeen years, of umbilical hernia, which strictly deserve the name of *congenital* umbilical hernia. The funis ends in a sort of bag, containing some of the viscera, which pass out of the abdomen through an aperture in the situation of the navel. The swelling is not covered with skin, so that the contents of the hernia can be seen through the then distended covering of the cord. The disease is owing to a preternatural deficiency in the abdominal muscles, and the hope of cure must be regulated by the size of the malformation and quantity of viscera protruded.

HE'RNIA U'TERI. *Hysterocele.* Instances have occurred of the uterus being thrust through the rings of the muscles; but this is scarcely to be discovered, unless in a pregnant state, when the strugglings of a child would discover the nature of the disease. In that state, however, it could scarcely ever occur. It is the *cerexis* of Hippocrates.

HE'RNIA VAGINA'LIS. *Elytrocele.* Vaginal hernia. A tumour occurs within the os externum of the vagina. It is elastic, but not painful. When compressed, it readily recedes, but is reproduced by coughing, or even without this, when the pressure is removed. The inconveniences produced are an inability to undergo much exercise, or exertion; for every effort of this sort brings on a sense of bearing down. The vaginal hernia protrudes in the space left between the uterus and rectum. This space is bounded below by the peritoneum, which membrane is forced downwards, towards the perinæum; but being unable to protrude further in that direction, is pushed towards the back part of the vagina. These cases probably are always intestinal. Some herniæ protrude at the anterior part of the vagina.

HE'RNIA VARICO'SA. See *Circocele.*

HE'RNIA VENTO'SA. See *Pneumatocele.*

HE'RNIA VENTRA'LIS. *Hypogastrocele.* The ventral hernia may appear at almost any point of the anterior part of the belly, but is most frequently found between the recti muscles. The portion of intestine, &c. &c. is always contained in a sac made by the protrusion of the peritonæum. Mr. A. Cooper imputes its causes to the dilatation of the natural foramina, for the transmission of vessels, to congenital deficiencies, lacerations, and wounds of the abdominal muscles, or their tendons. In small ventral herniæ, a second fascia is found beneath the superficial one; but in large ones the latter is the only one covering the sac.

HE'RNIA VESICA'LIS. *Hernia cystica. Cystocele.* The urinary bladder is liable to be thrust forth, from its proper situation, either through the opening in the oblique muscle, like the inguinal hernia, or under Poupart's ligament, in the same manner as the femoral.

This is not a very frequent species of hernia, but does happen, and has as plain and determined a character as any other.

HERNIA'RIA. (From *hernia*, a rupture; so called from its supposed efficacy in curing ruptures.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* Rupture-wort.

HERNIA'RIA GLA'BRA. The systematic name of the rupture-wort. *Herniaria.* This plant, though formerly esteemed as efficacious in the cure of hernias, appears to be destitute, not only of such virtues, but of any other. It is the *Herniaria glabra* of Linnæus; has no smell nor taste.

HERNIO'TOMY. (*Herniotomia*, from *hernia*, and τεμνω, to cut.) The operation to remove the strangulated part in cases of incarcerated herniæ.

HE′RPES. (From ερπω, to creep; because it creeps and spreads about the skin.) Tetter. A genus of disease in the class *locales*, and order *dialyses*, of Cullen, distinguished by an assemblage of numerous little creeping ulcers, in clusters, itching very much, and difficult to heal, but terminating in furfuraceous scales.

Mr. Bell, in his treatise on ulcers, arranges the herpes amongst the cutaneous ulcers, and says, that all the varieties of importance may be comprehended in the four following species: 1. *Herpes farinosus*, or what may be termed the *dry tetter*, is the most simple of all the species; it appears indiscriminately in different parts of the body, but most commonly on the face, neck, arms, and wrists, in pretty broad spots and small pimples; these are generally very itchy, though not otherwise troublesome; and, after continuing a certain time, they at last fall off in the form of a white powder, similar to fine bran, leaving the skin below perfectly sound; and again returning in the form of a red efflorescence, they fall off, and are renewed as before. 2. *Herpes pustulosus.* This species appears in the form of pustules, which originally are separate and distinct, but which afterwards run together in clusters. At first, they seem to contain nothing but a thin watery serum, which afterwards turns yellow, and, exuding over the whole susface of the part affected, it at last dries into a thick crust, or scab; when this falls off, the skin below frequently appears entire, with only a slight degree of redness on its surface; but on some occasions, when the matter has probably been more acrid, upon the scab falling off, the skin is found slightly excoriated. Eruptions of this kind appear most frequently on the face, behind the ears, and on other parts of the head; and they occur most commonly in children. 3. *Herpes miliaris.* The miliary tetter. This breaks out indiscriminately over the whole body; but more frequently about the loins, breast, perinæum, scrotum, and inguina, than in other parts. It generally appears in clusters, though sometimes in distinct rings, or circles, of very minute pimples, the resemblance of which to the millet-seed, has given rise to the denomination of the species. The pimples are at first, though small, perfectly separate, and contain nothing but a clear lymph, which, in the course of this disease, is excreted upon the surface, and there forms into small distinct scales; these, at last, fall off, and leave a considerable degree of inflammation below, that still continues to exude fresh matter, which likewise forms into cakes, and so falls off as before. The itching, in this species of complaint, is always very troublesome; and the matter discharged from the pimples is so tough and viscid, that every thing applied to the part adheres, so as to occasion much trouble and uneasiness on its being removed. 4. *Herpes exedens*, the eating and corroding tetter; so called from its destroying or corroding the parts which it attacks, appears commonly, at first, in the form of several small painful ulcerations, all collected into larger spots, of different sizes and of various figures, with always more or less of an erysipelatous inflammation. These ulcers discharge large quantities of a thin, sharp, serous matter; which sometimes forms into small crusts, that in a short time fall off; but most frequently the discharge is so thin and acrid as to spread along the neighbouring parts, where it soon produces the same kind of sores. Though these ulcers do not, in general, proceed farther than the cutis vera, yet sometimes the discharge is so very penetrating and corrosive as to destroy the skin, cellular substance, and, on some occasions, even the muscles themselves. It is this species that should be termed the *depascent*, or *phagedenic* ulcer, from the great destruction of parts which it frequently occasions. See *Phagedæna*.

He′rpes ambulati′va. A species of erysipelas which moves from one part to another.

He′rpes colla′ris. Tetters about the neck.

He′rpes depa′scens. The same as herpes exedens. See *Herpes*.

He′rpes esthio′menos. Herpes destroying the skin by ulceration.

He′rpes facie′i. Red pimples common in the faces of adults.

He′rpes farino′sus. See *Herpes*.

He′rpes fe′rus. Common erysipelas.

He′rpes I′ndica. A fiery, itchy herpes, peculiar to India.

He′rpes milia′ris. See *Herpes*.

He′rpes peri′scelis. That species of erysipelas known by the name of shingles. See *Erysipelas*.

He′rpes pustulo′sus. See *Herpes*.

He′rpes ra′piens. Venereal ulceration in the head.

He′rpes serpi′go. A name given to the cutaneous affection popularly called a *ringworm*. See *Psoriasis*. Till the recent observations of Dr. Willan, this disease has not been well discriminated by any author, though it is one with which few practitioners are unacquainted.

He′rpes si′ccus. The dry, mealy tetter round the knees.

He′rpes syphili′ticus. *Herpes venereus.* An herpetic venereal eruption on the skin.

He′rpes zo′ster. Shingles encircling the body. See *Erysipelas*.

Herpetic eruptions. See *Herpes*.

He′rpeton. (From ερπω, to creep.) A creeping pustule, or ulcer.

HEWSON, William, was born at Hexham, in 1739. After serving an apprenticeship to his father, he came to London at the age of twenty, and resided with Mr. John Hunter, attending also the lectures of Dr. Hunter. His assiduity and skill were so conspicuous, that he was appointed to superintend the dissecting room, when the former went abroad with the army in 1760. He then studied a year at Edinburgh, and in 1762 he became associated with Dr. Hunter in delivering the anatomical lectures, and he was afterwards allowed an apartment in Windmill-street. Here he pursued his anatomical investigations, and his experimental enquiries into the properties of the blood, of which he published an account in 1771. He also communicated to the Royal Society several papers concerning the lymphatic system in birds and fishes, for which he received the Copleyan medal, and was soon after elected a fellow of that body. He began a course of lectures alone in 1772, having quitted Dr. Hunter two years before, and soon became very popular. In 1774 he published his work on the Lymphatic System. But not long after his life was terminated by a fever, occasioned by a wound received in dissecting a morbid body, in the 35th year of his age.

Hexapha′rmacum. (From εξ, six, and φαρμακον, a medicine.) Any medicine in the composition of which are six ingredients.

Hibe′rnicus la′pis. See *Lapis hibernicus.*

HIBI′SCUS. (From ιβις, a stork, who is said to chew it, and inject it as a clyster.) The name of a genus of plants in the Linnæan system. Class, *Monadelphia.* Order, *Polyandria.*

Hibi′scus abelmo′schus. The systematic name of the plant whose seeds are called musk-seed. *Abelmoschus. Granum moschi. Moschus Arabum. Ægyptia moschata. Bamia moschata. Alcea. Alcea Indica. Alcea Ægyptiaca villosa. Abrette. Abelmosch. Abelmusk.* The seeds of a plant called the musk-mallow, which have the flavour of musk. The plant *Hibiscus abelmoschus* of Linnæus, is indigenous in Egypt, and in many parts of both the Indies. The best comes from Martinico. By the Arabians the seeds are esteemed cordial, and are mixed with their coffee, to which they impart their fragrance. In this country they are used by the perfumers.

Hi′ccough. Hiccup. A spasmodic affection of the diaphragm, generally arising from irritation produced by acidity in the stomach, error of diet, &c.

Hidro′a. (From ιδρως, sweat.) A pustular disease, produced by sweating in hot weather.

Hidro′crisis. (From ιδρως, sweat, and κρινω, to judge.) A judgment formed from the sweat of the patient.

Hidro′nosos. (From ιδρως, sweat, and νοσος, a disease.) The sweating sickness.

Hidropy′retus. (From ιδρως, sweat, and πυρετος, a fever.) The sweating fever, or sickness. See *Sudor Anglicus.*

Hidro′tica. (From ιδρως, sweat.) Medicines which cause perspiration.

Hidrotopoie′tica. (From ιδρως, sweat, and ποιεω, to make.) Sudorifics.

Hi′era pi′cra. (From ιερος, holy, and πικρος, bitter.) Holy bitter. Pulvis aloeticus, formerly called *hiera logadii*, made in the form of an electuary with honey. It is now kept in the form of dry powder, prepared by mixing socotorine aloes, one pound, with three ounces of white canella.

Hierabo′tane. (From ιερος, holy, and βοτανη, an herb; so called from its supposed virtues.) A species of verbena.

Hieraca′ntha. (From ιεραξ, a hawk, and ανθος, a flower; so named because it seizes passengers as a hawk does its prey.) A sort of thistle.

HIERA′CIUM. (From ιεραξ, a hawk; so called because hawks feed upon it, or because it was said that hawks applied the juice of it to cleanse their eyes.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.* Hawk-weed.

Hiera′cium pilose′lla. The systematic name of the auricula muris. *Pilosella. Myosotis.* Mouse-ear. This common plant, *Hieracium pilosella* of Linnæus, contains a bitter lactescent juice, which has a slight degree of astringency. The roots are more powerful than the leaves. They are very seldom used in this country.

Hiera′culum. The hieracium, or hawkweed.

Hiera′nosos. (From ιερος, holy, and νοσος, a disease; so called because it was supposed to be that disorder which our Saviour cured in those who were said to be possessed of devils.) The epilepsy.

Hiera′ticum. (From ιερος, holy.) A poultice for the stomach, so named from its supposed divine virtues.

HIGHMORE, Nathaniel, was born at Fordingbridge, in Hampshire, in 1613. After graduating at Oxford, he settled at Sherborne, where he obtained considerable reputation in practice, and died in 1684. He pursued the study of anatomy with zeal, though with limited opportunities of dissection; and his name has been attached to a part, though not originally discovered by him, namely, the Antrum Maxillare, which had been before mentioned by Casserius. His principal work is "Corporis humani disquisitio Anatomica," printed at the Hague in 1651, with figures, chiefly from Vesalius. He also published two dissertations on Hysteria and Hypochondriasis; and a history of Generation.

Highmore's antrum. See *Antrum of Highmore.*

Higue'ro. The calabash-tree. Fruit said to be febrifuge.

Hilda'nus. See *Fabricius.*

Himanto'sis. (From ιμας, a thong of leather.) A relaxation uf the uvula, when it hangs down like a thong.

Hi'mas. A relaxation of the uvula.

Hin. *Hindisch. Hing.* Assafœtida.

Hippoca'stanum. (From ιππος, a horse, and κaςavov, a chesnut; so called from its size.) Common horse-chesnut. See *Æsculus.*

HIPPOCRATES, usually called the father of physic, was born in the island of Cos, about 460 years before Christ. He is reckoned the 18th lineal descendant from Æsculapius, the profession of medicine having been hereditarily followed in that family, under whose direction the Coan school attained its high degree of eminence, and by the mother's side he is said to have descended from Hercules. Born with these advantages, and stimulated by the fame of his ancestors, he devoted himself zealously to the cultivation of the healing art. Not content with the empirical practice, which was derived from his predecessors, he studied under Herodicus, who had invented the gymnastic medicine, as well as some other philosophers. But he appears to have judged carefully for himself, and to have adopted only those principles, which seemed founded in sound reason. He was thus enabled to throw light on the deductions of experience, and clear away the false theories with which medicine had been loaded by those who had no practical knowledge of diseases, and bring it into the true path of observation, under the guidance of reason. Hence the physicians of the rational or dogmatic sect always acknowledged him as their leader. The events of his life are involved in much obscurity and fable. But he appears to have travelled much, residing at different places for some time, and practising his profession there. He died at Larissa, in Thessaly, at a very advanced age, which is variously stated from 85 to 109 years. He left two sons, Thessalus and Draco, who followed the same profession, and a daughter, married to his favourite pupil Polybus, who arranged and published his works; and he formed many other disciples. He acquired a high reputation among his countrymen, which has descended to modern times; and his opinions have been respected as oracles, not only in the schools of medicine, but even in the courts of law. He has shared with Plato the title of divine: statues and temples have been erected to his memory, and his altars covered with incense, like those of Æsculapius himself. Indeed, the qualifications and duties required in a physician, were never more fully exemplified than in his conduct, nor more eloquently described than by his pen. He is said to have admitted no one to his instructions without the solemnity of an oath, in which the chief obligations are, the most religious attention to the advantages of the sick, the strictest chastity, and inviolable secrecy concerning matters which ought not to be divulged. Besides these characteristics, he displayed great simplicity, candour, and benevolence, with unwearied zeal in investigating the progress and nature of diseases, and in administering to their cure. The books attributed to him amount to 72, of which, however, many are considered spurious, and others have been much corrupted. The most esteemed, and generally admitted genuine, are the essay "On Air, Water, and Situation," the first and third books of "Epidemics," that on "Prognostics," the "Aphorisms," the treatise "On the Diet in acute Diseases," and that "On Wounds of the Head." He wrote in the Ionic dialect, in a pure but remarkably concise style. He was necessarily deficient in the knowledge of anatomy, as the dissection of human bodies was not then allowed; whence his Physiology also is, in many respects, erroneous: but he, in a great measure, compensated this by unceasing observation of diseases, whereby he attained so much skill in pathology and therapeutics, that he has been regarded as the founder of medical science; and his opinions still influence the healing art in a considerable degree. He diligently investigated the several causes of diseases, but especially their symptoms, which enabled him readily to distinguish them from each other: and very few of those noticed by him are now unknown, mostly retaining even the same names. But he is more remarkably distinguished by his Prognostics, which have been comparatively little improved since, founded upon various appearances in the state of the patient, but especially upon the excretions. His attention seems to have been directed chiefly to these, in consequence of a particular theory. He supposed that there are four humours in the body, blood, phlegm, yellow and black bile, having different degrees of heat or coldness, moisture or dryness, and that to certain changes in the quantity or quality of these all diseases might be referred; and farther, that in acute disorders a concoction of the morbid humours took place, followed by a critical discharge, which he believed to happen especially on certain days. But he seems to have paid little, if any, attention, to the state of the pulse. He advanced another opinion, which has since very generally prevailed, that there is a principle, or power in the system, which he called Nature, tending to the preservation of health, and the removal of disease. He, therefore, advised practitioners carefully to observe and promote the efforts of nature, at the same time correcting morbid states by their opposites, and endeavouring to bring back the fluids into their proper channels. The chief part of his treatment at first was a great restriction of the diet; in very acute diseases merely allowing the mouth to be moistened occasionally for three or four days, and only a more plentiful dilution during a fortnight, provided the strength would bear it; afterwards a more substantial diet was directed, but hardly any medicines, except gentle emetics, and laxatives, or glysters. Where these means failed, very active purgatives were employed, as hellebore, elaterium, &c., or sometimes the sudorific regimen, or garlick and other diuretics. He seems cautious in the use of narcotics, but occasionally had recourse to some of the preparations of lead, copper, silver, and iron. He bled freely in cases of extreme pain or inflammation, sometimes opening two veins at once, so as to produce fainting; and also took blood often by cupping, but preferably from a remote part, with a view of producing a revulsion. Where medicines fail, he recommends the knife, or even fire, as a last resource, and he advises trepanning, in cases of violent head-ach. But he wished tbe more difficult operations of surgery to be performed only by particular persons, who might thereby acquire more expertness.

Hippocra'ticus. See *Facies hipprocratica.*

Hippola'pathum. (From ἵππος, a horse, and λαπαθον, the lapathum; a species of lapathum; so named from its size.) See *Rumex Patientia.*

Hippoma'rathrum. (From ἵππος, a horse, and μαραθρον, fennel; so named from its size.) See *Peucedanum Silaus.*

Hipposeli'num. (From ἵππος, a horse, and σελινον, purslane; so named because it resembles a large kind of purslane.) See *Smyrnium Olusatrum.*

HIPPU'RIS. (From ιππος, a horse, and ουρα, a tail.) 1. Some herbs are thus named because they resemble a horse's tail.

2. The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.* Mare's tail.

Hippu'ris vulga'ris. The systematic name of the horse's or mare's tail. *Equisetum.* It possesses astringent qualities, and is frequently used by the common people as tea in diarrhœas and hæmorrhages. The same virtues are also attributed to the *Equisetum arvense, fluviatile, limosum,* and other species, which are directed indiscriminately by the term *Equisetum.*

Hippus. (From ἵππος, a horse; because the eyes of those who labour under this affection are continually twinkling and trembling, as is usual with those who ride on horseback.) A repeated dilatation and alternate constriction of the pupil, arising from spasm, or convulsion of the iris.

HIPS. The ripe fruit of the dog-rose. They are chiefly used as a sweet-meat, or in a preserved state, to make up medicines into pills, &c. See *Confectio Rosæ caninæ.*

Hir. (From χειρ, the hand.) The palm of the hand.

Hira. (From *hir,* the palm of the hand; because it is usually found empty.) The intestinum jejunum.

Hi'rcus bezoa'rticus. (*Quasi hirtus; from his shaggy hair.*) The goat which affords the oriental bezoar.

Hi'rquus. (From ερκος, a hedge; because it is hedged in by the eye-lash.) The angle of the eye.

HIRU'DO. (*Quasi haurudo,* from *haurio,* to draw out; so named from its greediness to suck blood.) The leech.

Hirundina'ria. (From *hirundo,* the swallow; so called from the resemblance of its pods to a swallow.) Swallow-wort, or asclepias. See *Lysimachia Nummularia* and *Asclepias Vincetoxicum.*

Hiru'ndo. (*Ab hærendo;* from its sticking its nest to the eaves of houses.) The swallow. The cavity in the bend of the arm.

Hispi'dula. (From *hispidus,* rough; so named from the rough, woolly surface of its stalks.) See *Gnaphalium.*

HODGES, Nathaniel, son of the Dean of Hereford, was born at Kensington, and graduated at Oxford in 1659. He then settled in London, and continued there during the plague, when most other physicians deserted their post. He was twice taken ill, but by timely remedies recovered. He afterwards published an authentic account of the disease, which appears to have destroyed 68,596 persons in the year 1665. It is to be regretted, that a person, who had performed such an important and dangerous service to his fellow citizens, should have died in prison, confined for debt, in 1684.

HOFFMANN, Frederick, was born at Halle, in Saxony, 1660. Having lost his parents from an epidemic disease, he went to study medicine at Jena, where he graduated in 1681. The year following he published an excellent tract "De Cinnabari Antimonii," which gained him great applause, and numerous pupils to attend a course of chemical lectures, which he delivered there. He then practised his profession for two years at Minden with very good success; and after travelling to Holland and England, where he received many marks of distinction, he was appointed on his return in 1685 physician to the garrison, and subsequently to Frederic William, Elector of Brandenburgh, and the whole principality of Minden. He was however induced to settle in 1688 as public physician at Halberstadt; where he published a treatise, "De Insufficientia Acidi et Viscidi." An university being founded at Halle, by Frederic III., afterwards first King of Prussia, Hoffmann was appointed in 1693 primary Professor of Medicine, and composed the Statutes of that institution, and recommended Stahl as his colleague. He was most active in his professional duties; and by the eloquence and learning displayed in his lectures, and publications he extended his own reputation, and that of the new university. He was admitted into the scientific societies at Berlin, Petersburgh and London; and had the honour of attending many of the German courts as physician. Haller asserts, that he acquired great wealth by the sale of various chemical nostrums. He examined many of the mineral waters in Germany, particularly those of Seidlitz, which he first introduced to public notice in 1717. The year after he commenced the publication of his "Medicina Rationalis Systematica," which was received with great applause by the faculty in various parts of Europe, and is said to have occupied him nearly twenty years. He also published two volumes of "Consultations," and three books of select chemical observations. In 1727, he was created Count Palatine by the Prince of Schwartzenberg, whom he carried through a dangerous disease. About seven years after he attended Frederic William, King of Prussia, and is said by dignified remonstrance to have secured himself against the brutal rudeness, shown by that monarch to those about him; he was ultimately distinguished with great honours, and invited strongly to settle at Berlin, but declined it on account of his advanced age. He continued to perform his duties at Halle till 1742, in which year he died. Hoffman was a very voluminous writer; his works have been collected in six folio volumes, printed at Geneva. They contain a great mass of valuable practical matter, partly original, but detailed in a prolix manner, and intermixed with much hypothesis. He has the merit however of first turning the attention of practitioners to the morbid affections of the nervous system, instead of framing mere mechanical or chemical theories: but he did not carry the doctrine to its fullest extent, and retained some of the errors of the humoral pathology. He pursued the study of chemistry and pharmacy with considerable ardour; but his practice was cautious, particularly in advanced age, trusting much to vegetable simples.

Hog's fennel. See *Peucedanum.*

Ho′lcimos. (From ἑλκω, to draw.) It sometimes means a tumour of the liver.

HO′LCUS. 1. The Indian millet-seed, which is said to be nutritive.

2. The name of a genus of plants in the Linnæan system. Class, *Polygamia.* Order, *Monoecia.*

Holly, knee. See *Ruscus.*

Holly, sea. See *Eryngium.*

Holmi′scus. (Dim. of ολμος, a mortar.) A small mortar. Also the cavity of the large teeth, because they pound the food as in a mortar.

Holophly′ctides. (From ολος, whole, and φλυκτις, a pustule.) Little pimples all over the body.

Holo′stes. See *Holosteus.*

Holo′steus. (From ολος, whole, and οστεον, a bone.) *Holostes. Holosteum.* Gluebone, or osteocolla.

Holo′steum. See *Holosteus.*

Holoto′nicus. (From ολος, whole and τεινω, to stretch.) Applied to diseases accompanied with universal convulsion, or rigor.

Holy thistle. See *Centaurea benedicta.*

HOLYWELL WATER. A mineral water, arranged under the class of simple cold waters, remarkable for its purity. It possesses similar virtues to that of Malvern. See *Malvern water.*

Ho′ma. An anasarcous swelling.

Homberg's sedative salt. See *Boracic acid.*

HOMOGENEOUS. (*Homogeneus*; from ομος, like, and γενος, a kind. Uniform, of a like kind, or species.) A term used in contra-distinction to *heterogeneous*, when the parts of the body are of different qualities.

Homopla′tæ os. (Ωμοπλατα, from ωμος, the shoulder, and πλατα, the blade.) See *Scapula.*

HONEY. *Mel.* A substance collected by bees from the nectary of flowers, resembling sugar in its elementary properties. It has a white or yellowish colour, a soft and grained consistence, and a saccharine and aromatic smell. Honey is an excellent food, and a softening and slightly aperient remedy: mixed with vinegar, it forms *oxymel*, and is used in various forms, in medicine and pharmacy. It is particularly recommended to the asthmatic, and those subject to gravel complaints, from its detergent nature. Founded upon the popular opinion of honey, as a pectoral remedy, Dr. Hill's balsam of honey, a quack medicine, was once in demand; but this, besides honey, contained balsam of Tolu, or gum Benjamin, in solution.

Honey-suckle. See *Lonicera periclymenum.*

Hooping-Cough. See *Pertussis.*

Hoplochri′sma. (From οπλον, a weapon, and χρσιμα, a salve.) A salve which was ridiculously said to cure wounds by consent; that is, by anointing the instrument with which the wound was made.

Hops. See *Humulus Lupulus.*

Hop tops. The young sprouts of the hop-plant are so called; plucked when only a foot above the ground, and boiled, they are eaten with butter as a delicacy, and are very wholesome.

HORDE´OLUM. (Diminitive of *hordeum*, barley.) A little tumour on the eye-lids, resembling a barley corn. A stye. Scarpa remarks, the stye is strictly only a little boil, which projects from the edge of the eye-lids, mostly near the great angle of the eye. This little tumour, like the furunculus, is of a dark red colour, much inflamed, and a great deal more painful than might be expected, considering its small size. The latter circumstance is partly owing to the vehemence of the inflammation producing the stye, and partly to the exquisite sensibility and tension of the skin, which covers the edge of the eye-lids. On this account, the hordeolum very often excites fever and restlessness, in delicate, irritable constitutions; it suppurates slowly and imperfectly; and, when suppurated, has no tendency to burst.

The stye, like other furunculous inflammations, forms an exception to the general rule, that the best mode in which inflammatory swellings can end, is resolution; for, whenever a furunculous inflammation extends so deeply as to destroy any of the cellular substance, the little tumour can never be resolved, or only imperfectly so. This event, indeed, would rather be hurtful, since there would still remain behind a greater or smaller portion of dead cellular membrane; which sooner or later, might bring on a renewal of the stye, in the same place as before, or else become converted into a hard indolent body, deforming the edge of the eye-lid.

HO´RDEUM. (*Ab horrore aristæ;* from the unpleasantness of its beard to the touch.) 1. The name of a genus of plants in the Linnæan system. Class, *Triandria*. Order. *Digynia*. Barley.

2. The pharmacopœial name of the common barley. The seed called barley, is obtained from several species of *hordeum*, but principally from the *vulgare*, or common or Scotch barley, and the *distichon*, or *hordeum gallicum vel mundatum*, or French barley, of Linnæus. It is extremely nutritious and mucilaginous, and in common use as a drink, when boiled, in all inflammatory diseases and affections of the chest, especially when there is cough or irritation about the fauces. A decoction of barley with gum, is considered a useful diluent and demulcent in dysury and strangury; the gum mixing with the urine, sheaths the urinary canal from the acrimony of the urine. Amongst the antients, decoctions of barley, Κριθη, were the principal medicine, as well as aliment, in acute diseases. Barley is freed from its shells in mills, and in this state called Scotch and French barley. In Holland, they rub barley into small round grains, somewhat like pearls, which is therefore called *pearl barley*, or *hordeum perlatum*. See *Ptisana*.

Ho´rdeum cau´sticum. See *Cevadilla*.

Ho´rdeum di´stichon. This plant affords the barley in common use. See *Hordeum*.

Ho´rdeum perla´tum. See *Hordeum*.

Ho´rdeum vulgare. The systematic name of one of the plants which afford the barley. See *Hordeum*.

Horehound. See *Marrubium*.

Ho´rminum. (From ορμαω, to incite; named from its supposed qualities of provoking to venery.) Garden clary. The *Salvia sclarea* of Linnæus.

Horn, harts. See *Cornu*.

HORRIPILA´TIO. (A sense of creeping in different parts of the body.) A symptom of the approach of fever.

Horse-chesnut. See *Æsculus Hippocastanum*.

Horse-radish. See *Cochlearia Armoracia*.

Horse-tail. See *Hippuris vulgaris*.

HORSTIUS, Gregory, was born at Torgau in 1578. After studying in different parts of Germany and Switzerland, he graduated at Basil in 1606, and was soon after appointed to a medical professorship at Wittenburg. But two years after he received a similar appointment at Giessen, and was made chief physician of Hesse; where he attained considerable reputation in his profession. In 1722 he went to Ulm, on an invitation from the magistracy as public physician and president of the college; where his learning, skill and humanity, procured him general esteem. He died in 1636. His works were collected by his sons in three folio volumes.

Ho´rtus. (From *orior*, to rise, as being the place where vegetables grow up.) 1. A garden.

2. The genitals, or womb of a woman, which is the repository of the human semen.

Hounds-tongue. See *Cynoglossum*.

House-leek. See *Sempervivum tectorum*.

HUBER, John James, was born at Basle in 1707, and graduated there at the age of 26, after studying under the celebrated Haller and other able teachers. Two years after he was appointed physician to the Court of Baden Dourlach. He materially assisted Haller in his work on the Botany of Switzerland, and was consequently invited by him in 1738 to be dissector at Gottingen. He speedily rose to considerable reputation there, and received different public appointments. He had likewise the honour of being elected into the most celebrated of the learned societies of Europe. He died in 1778. The chief objects of his research were the spinal marrow, and the nerves originating from it: he also inquired into the supposed influence of the imagination of the mother on the fœtus, and into the cause of miscarriages.

HULME, Nathaniel, was born at Halifax, in Yorkshire, 1732, and bred to the profession of a surgeon-apothecary. After serving some time in the navy, he graduated at Edinburgh in 1765. He then settled in London, and was soon after appointed physician to the General Dispensary, the first institution of that kind established in the metropolis. About the year 1775 he was elected physician to the Charter-house. In 1807 he died, in consequence of a severe bruise by a fall. He was author of several dissertations on scurvy, puerperal fever, &c. He also made a series of experiments on the light spontaneously emitted from various bodies, published in the Philosophical Transactions; and he was one of the editors of the London Practice of Physic

Human body. See *Man.*

Humecta'ntia. (From *humecto*, to make moist.) Medicines which soften and make moist the solids of the body.

HU'MERAL ARTERY. (*Arteria humeralis.*) Brachial artery. The axillary artery, having passed the tendon of the great pectoral muscle, changes its name to the brachial or humeral artery, which name it retains in its course down the arm to the bend, where it divides into the radial and ulnar arteries. In this course it gives off several muscular branches, three of which only deserve attention: 1. *The arteria profunda superior*, which goes round the back of the arm to the exterior muscle, and is often named the upper muscular artery. 2. Another, like it, called *arteria profunda inferior*, or the lower muscular artery. 3. *Ramus anastomoticus major*, which anastomoses round the elbow with the branches of the ulnar artery.

Humera'lis mu'sculus. See *Deltoides.*

Humera'lis ne'rvus. The cervical nerve.

HU'MERI OS. (*Humerus*; from ωμος, the shoulder.) *Os humeri. Os brachii.* A long cylindrical bone, situated between the scapula and fore-arm. Its upper extremity is formed somewhat laterally and internally, into a large, round, and smooth head, which is admitted into the glenoid cavity of the scapula. Around the basis of this head is observed a circular fossa, deepest anteriorly and externally, which forms what is called the neck of the bone, and from the edge of which arises the capsular ligament, which is farther strengthened by a strong membranous expansion, extending to the upper edge of the glenoid cavity, and to the coracoid process of the scapula; and likewise by the tendinous expansions of the muscles, inserted into the head of the humerus. This capsular ligament is sometimes torn in luxation, and becomes an obstacle to the easy reduction of the bone. The articulating surface of the head is covered by a cartilage, which is thick in its middle part, and thin towards its edges; by which means it is more convex in the recent subject than in the skeleton. This upper extremity, besides the round smooth head, affords two other smaller protuberances. One of these, which is the largest of the two, is of an irregular oblong shape, and is placed at the back of the head of the bone, from which it is separated by a kind of groove, that makes a part of the neck. This tuberosity is divided, at its upper part, into three surfaces; the first of these, which is the smallest and uppermost, serves for the insertion of the supraspinatus muscle; the second, or middlemost, for the insertion of the infraspinatus; and the third, which is the lowest and hindmost, for the insertion of the teres minor. The other smaller tuberosity is situated anteriorly, between the larger one and the head of the humerus, and serves for the insertion of the subscapularis muscle. Between these two tuberosities there is a deep groove for lodging the tendinous head of the biceps brachii; the capsular ligament of the joint affording here a prolongation, thinner than the capsule itself, which covers and accompanies this muscle to its fleshy portion, where it gradually disappears in the adjacent cellular membrane. Immediately below its neck, the os humeri begins to assume a cylindrical shape, so that here the body of the bone may be said to commence. At its upper part is observed a continuation of the groove for the biceps, which extends downwards, about the fourth part of the length of the bone in an oblique direction. The edges of this groove are continuations of the greater and lesser tuberosities, and serve for the attachment of the pectoralis, latissimus dorsi, and teres major muscles. The groove itself is lined with a glistening substance like cartilage, but which seems to be nothing more than the remains of tendinous fibres. A little lower down, towards the external and anterior side of the middle of the bone, it is seen rising into a rough ridge for the insertion of the deltoid muscle. On each side of this ridge the bone is smooth and flat, for the lodgment of the brachialis internus muscle; and behind the middle part of the outermost side of the ridge is a channel, for the transmission of vessels into the substance of the bone. A little lower down, and near the inner side of the ridge, there is sometimes seen such another channel, which is intended for the same purpose. The os humeri, at its lower extremity, becomes gradually broader and flatter, so as to have this end nearly of a triangular shape. The bone, thus expanded, affords two surfaces, of which the anterior one is the broadest, and somewhat convex; and the posterior one narrower and smoother. The bone terminates in four large processes, the two outermost of which are called *condyles*, though not designed for the articulation of the bone. These condyles, which are placed at some distance from each other, on each side of the bone, are rough and irregular protuberances, formed for the insertion of muscles and ligaments, and differ from each other in size and shape. The external condyle, when the arm is in the most natural position, is found to be placed somewhat forwarder than the other. The internal condyle is longer, and more protuberant, than the external. From each of these processes, a ridge is continued upwards, at the sides of the bone. In the interval between the two condyles are placed the two articulating processes, contiguous to each other, and covered with cartilage. One of these, which is the smallest, is formed into a small, obtuse, smooth head, on which the radius plays. This little head is placed near the external condyle, as a part of which it has been sometimes described. The other, and larger process, is composed of two lateral protuberances and a middle cavity, all of which are smooth and covered with cartilage. From the manner in which the ulna moves upon this process. it has gotten the name of *trochlea*, or pulley. The sides of this pulley are unequal; that which is towards the little head, is the highest of the two; the other, which is contiguous to the external condyle, is more slanting, being situated obliquely from within outwards, so that when the fore-arm is fully extended, it does not form a straight line with the os humeri, and, for the same reason, when we bend the elbow, the hand comes not to the shoulder, as it might be expected to do, but to the fore-part of the breast. There is a cavity at the root of these processes, on each of the two surfaces of the bone. The cavity on the anterior surface is divided, by a ridge, into two, the external of which receives the end of the radius, and the internal one lodges the coronoid process of the ulna in the flexions of the fore-arm. The cavity on the posterior surface, at the basis of the pulley, is much larger, and lodges the olecranon when the arm is extended. The internal structure of the os humeri is similar to that of other long bones. In new-born infants, both the ends of the bone are cartilaginous, and the large head, with the two tubercles above, and the condyles, with the two articulating processes below, become epiphyses before they are entirely united to the rest of the bone.

HU′MERUS. (From ωμος.) *Adjutorium.* The shoulder, or joint, which connects the arm to the body. In Hippocrates it is called brachium.

Hu′milis. (From *humi*, on the ground; so named because it turns the eye downwards, and is expressive of humility.) See *Rectus inferior oculi.*

HU′MOR. (Ab *humo*, from the ground; because moisture springs from the earth.) A general name for any fluid of the body.

HU′MOR VI′TREUS. The vitreous humour of the eye, which takes its name from the resemblance to melted glass, is less dense than the crystalline but more than the aqueous humour; it is very considerable in the human eye, and seems to be formed by the small arteries that are distributed in cells of the hyaolid membrane; it is heavier than common water, slightly albuminous and saline.

Humour, Aqueous. See *Aqueous humour of the eye.*

Humour, Vitreous. See *Humor vitreus.*

Humours of the eye. They are three in number: the aqueous humour, crystalline lens, and vitreous humour. See *Eye.*

HU′MULUS. (From *humus*, the ground; so named because without factitious support it creeps along the ground.) The name of a genus of plants in the Linnæan system. Class, *Dioecia.* Order, *Pentandria.* The hop.

Hu′mulus lu′pulus. The systematic name of the hop-plant. *Lupulus. Convolvulus perennis.* The hop is the floral leaf or bractea of this plant, *Humulus lupulus* of Linnæus, that is dried and used in various kinds of strong beer. Hops have a bitter taste, less ungrateful than most of the other strong bitters, accompanied with some degree of warmth and aromatic flavour, and are highly intoxicating. The hop-flower also exhales a considerable quantity of its narcotic power in drying; hence those who sleep in the hop-houses are with difficulty roused from their slumber. A pillow stuffed with these flowers is said to have laid our present monarch to sleep when other remedies had failed.

HUNTER, William, was born in 1718, at Kilbride in Scotland. He was educated for the church at Glasgow; but feeling scruples against subscription, and having become acquainted with the celebrated Cullen, he determined to pursue the medical profession. After living three years with that able teacher who then practised as a surgeon apothecary at Hamilton, he went to Edinburgh in November 1740; and in the following summer came to London with a recommendation to Dr. James Douglas, who engaged him to assist in his dissections, and superintend the education of his son. He was also enabled by that physician's liberality to attend St. George's Hospital, and other teachers; but death deprived him of so valuable a friend within a year. However he remained in the family, and prosecuted his studies with great zeal. In 1743, he communicated to the Royal Society a paper on the structure and diseases of articulating cartilages, which was much admired. He now formed the design of teaching anatomy; and, after encountering some difficulties, commenced by giving a course on the operations of surgery to a society of navy surgeons in lieu of Mr. Samuel Sharpe. At first he felt considerable solicitude in speaking in public; but gradually this wore off, and he evinced a remarkable facility in expressing himself with perspicuity and elegance. He gave so much satisfaction that he was requested to extend the plan to anatomy, which he began accordingly in 1746. His success was considerable, but having somewhat embarrassed himself at first by assisting his friends, he was obliged to adopt proper caution in lending money; which, with his talents, industry and economy enabled him to acquire an ample fortune. In 1748, he accompanied his pupil, young Douglas, on a tour, and having seen the admirable injections of Albinus at Leyden, he was inspired with a strong emulation to excel in that branch. On his return he relinquished the profession of surgery, and devoted himself to midwifery, to which his person and manners well adapted him; and having been appointed to the Middlesex and British-lying-in hospitals, as well as favoured by other circumstances, he made a rapid advance in practice. In 1750 he obtained a doctor's degree from Glasgow, and was afterwards often consulted as a physician in cases, which required peculiar anatomical skill. Six years after he was admitted a licentiate of the College in London; and also a member of the society, by which the "Medical Observations and Enquiries" were published. He enriched that work with many valuable communications; particularly an account of the disease, since called Aneurismal Varix, a case of emphysema, with practical remarks, wherein he showed the fat to be deposited in distinct vesicles; and some observations on the retroversion of the uterus: and on the death of Dr. Fothergill he was chosen president of that society. In 1762 he published his "Medical Commentaries," in which he laid claim, with much asperity, to several anatomical discoveries, especially relative to the absorbent system, in opposition to the second Monro of Edinburgh. He was extremely tenacious of his rights in this respect, and would not allow them to be infringed even by his own brother. It must be very difficult, and of little importance, to decide such controversies; especially as the principal points concerning the absorbent system had been stated as early as 1726, in a work printed at Paris by M. Noguez. About the same period, the Queen being pregnant, Dr. Hunter was consulted; and two years after he was appointed her physician extraordinary. In 1767 he was chosen a fellow of the Royal Society, to which he communicated some papers; and in the year following he was appointed by the King professor of anatomy to the Royal Academy on its first institution; he was also elected into the society of Antiquaries, and some respectable foreign associations. In 1775 he published a splendid Work, which had occupied him for 24 years previously, "The Anatomy of the Gravid Uterus," illustrated by plates, admirable for their accuracy, as well as elegance; among other improvements, the membrana decidua reflexa, discovered by himself, was here first delineated. He drew up a detailed description of the figures; which was published after his death by his nephew, Dr. Baillie. Another posthumous publication, deservedly much admired, was the "Two Introductory Lectures" to his anatomical course. As his wealth increased he formed the noble design of establishing an anatomical school; and proposed to government, on the grant of a piece of ground, to build a proper edifice, and endow a perpetual professorship: but this not being acceded to, he set about the establishment in Great Windmill-street, where he collected a most valuable museum of anatomical preparations, subjects of natural history, scarce books, coins, &c. to which an easy access was always given. He continued to lecture and practise till near the period of his death in 1783. He bequeathed the use of his museum for 30 years to Dr. Baillie; after which it was to belong to the University of Glasgow.

HUNTER, John, was born ten years after his brother William. His early education was much neglected, and his temper injured, through his mother's indulgence. At a proper age he was put under a relation, a carpenter and cabinet-maker, who failed in his business. Hearing at this period of his brother's success, he applied to become his assistant, and accordingly came to London in the autumn of 1748. He made such proficiency in dissection, that he was capable of undertaking the demonstrations in the following season. During the summer he attended the surgical practice at different hospitals; and in 1756 he was appointed house-surgeon at St. George's. He had been admitted by his brother to a partnership in the lectures the year before. After labouring about ten years with unexampled ardour in the study of human anatomy, he turned his attention to that of other animals, with a view to elucidate physiology. His health was so much impaired by these pursuits, that in 1760 he went abroad as surgeon on the staff, and thus acquired a knowledge of gun-shot wounds. On his return after three years, he settled in London as a surgeon, and gave instructions in dissection and the performance of operations; and he continued with great zeal his researches into comparative anatomy, and natural history. Several papers were communicated by him to the Royal Society, of which he was elected a member in 1767. About this time, by his brother's interest, he was appointed one of the surgeons at St. George's Hospital; and his professional reputation was rapidly increasing. In 1771 he published the first part of his work on the teeth, displaying great accuracy of research: and two years after he began a course of lectures on the principles of surgery. He fell short of his brother in methodical arrangement, and facility of expressing his ideas, and indeed adopted a peculiar language, perhaps in part from the deficiency of his education; but he certainly brought forward many ingenious speculations in physiology and pathology, and suggested some important practical improvements, particularly the operation for popliteal aneurism. In 1776 he was appointed surgeon-extraordinary to the King; and soon after received marks of distinction from several foreign societies. His emoluments increasing, he took a large house in Leicester-square, and built a spacious museum, which he continued to store with subjects in comparative anatomy, at a very great expence. The post of Deputy-Surgeon-General to the army was conferred upon him in 1786; and in the same year his great work on the venereal disease appeared, which will ever remain a monument to his extraordinary sagacity and talent for observation. He also published at this period "Observations on the Animal Œconomy," chiefly composed of papers already printed in the Philosophical Transactions. In 1790 he was appointed Inspector-General of Hospitals, and Surgeon-General to the army; when he resigned his lectures to Mr. Home, whose sister he had married. He had been for two years before labouring under symptoms of organic disease about the heart, which were aggravated by any sudden exertion, or agitation of his mind; these increased progressively, and in October 1793, while at the hospital, being vexed by some untoward circumstance, he suddenly expired. He left a valuable treatise on the blood, inflammation, and gun-shot wounds, which was published soon after with a life prefixed, by his brother-in-law. His museum was directed to be offered to the purchase of Government: it was bought for 15,000*l.* and presented to the College of Surgeons, on condition of their opening it to public inspection, and giving a set of lectures annually explanatory of its contents. The preparations are arranged so as to exhibit all the gradations of nature, from the simplest state of animated existence up to man, according to the different functions. It comprehends also a large series of entire animals, skeletons of almost every genus, and other subjects of natural history.

Hurtsickle. The bluebottle, or *cyanus*, is so called because it is troublesome to cut down, and sometimes notches the sickle.

HUXHAM, John, was born about the end of the 17th century, and practised as a physician, with considerable reputation, at Plymouth, where he died in 1768. His writings display great learning and talent for observation. He kept a register of the weather and prevailing diseases for nearly thirty years, which was published in Latin in three volumes. He was early elected into the Royal Society, and communicated several papers on pathology and morbid anatomy. But his fame rests chiefly upon his "Essay on Fevers," which went through several editions; a dissertation being afterwards added on the malignant sore throat.

HYACIʹNTHUS. (Said by the poets to be named from the friend of Apollo, who was turned into this flower.) Hare-bells. The roots are bulbous; the flowers agreeably scented. Galen considered the root as a remedy in jaundice; it is ranked among the astringents, but of very inferior power.

HYALOʹIDES. (*Membrana hyaloides;* from ὑαλος, glass, and ειδος, likeness.) *Membrana arachnoidea.* Capsule of the vitreous humour. The transparent membrane enclosing the vitreous humour of the eye.

HYDAʹRTHRUS. (From ὑδωρ, water, and αρθρὸν, a joint.) *Hydarthron. Hydarthros. Spina ventosa* of the Arabian writers, Rhazes and Avicenna. White swelling. The white swelling, in this country, is a peculiarly common and exceedingly terrible disease. The varieties of white swelling are very numerous, and might usefully receive particular appellations. Systematic writers have generally been content with a distinction into two kinds, viz. *rheumatic* and *scrophulous.* The last species of the disease they also distinguish into such tumours as primarily affect the bones, and then the ligaments and soft parts; and into other cases, in which the ligaments and soft parts become diseased before there is any morbid affection of the bones.

These divisions, Mr. Samuel Cooper, in his treatise on the Diseases of the Joints, proves to be not sufficiently comprehensive; and the propriety of using the term *rheumatic* he thinks to be very questionable.

The knee, ankle, wrist, and elbow, are the joints most subject to white swellings. As the name of the disease implies, the skin is not at all altered in colour. In some instances, the swelling yields, in a certain degree, to pressure; but it never pits, and is almost always sufficiently firm to make an uninformed examiner believe that the bones contribute to the tumour. The pain is sometimes vehement from the very first; in other instances, there is hardly the least pain in the beginning of the disease. In the majority of scrophulous white swellings, let the pain be trivial or violent, it is particularly situated in one part of the joint, viz. either *the centre of the articulation*, or the *head of the tibia*, supposing the knee affected. Sometimes the pain continues without interruption; sometimes there are intermissions; and in other instances the pain recurs at regular times, so as to have been called, by some writers, periodical. Almost all authors describe the patient as suffering more uneasiness in the diseased part, when he is warm, and particularly when he is in this condition in bed.

At the commencement of the disease, in the majority of instances, the swelling is very inconsiderable, or there is even no visible enlargement whatever. In the little depressions, naturally situated on each side of the patella, a fulness first shows itself, and gradually spreads all over the affected joint.

The patient, unable to bear the weight of his body on the disordered joint, in consequence of the great increase of pain thus created, gets into the habit of only touching the ground with his toes; and the knee being generally kept a little bent in this manner, soon loses the capacity of becoming extended again. When white swellings have lasted a while, the knee is almost always found in a permanent state of flexion. In scrophulous cases of this kind, pain constantly precedes any appearance of swelling; but the interval between the two symptoms differs very much in different subjects.

The morbid joint, in the course of time, acquires a vast magnitude. Still the integuments retain their natural colour, and remain unaffected. The enlargement of the articulation, however, always seems greater than it really is, in consequence of the emaciation of the limb both above and below the disease.

An appearance of blue distended veins, and a shining smoothness, are the only alterations to be noticed in the skin covering the enlarged joint. The shining smoothness seems attributable to the distension, which obliterates the natural furrows and wrinkles of the cutis. When the joint is thus swollen, the integuments cannot be pinched up into a fold, as they could in the state of health, and even in the beginning of the disease.

As the distemper of the articulation advances, collections of matter form about the part, and at length burst. The ulcerated openings sometimes heal up; but such abscesses are generally followed by other collections, which pursue the same course. In some cases, these abscesses form a few months after the first affection of the joint; on other occasions, several years elapse, and no suppuration of this kind makes its appearance.

Such terrible local mischief must necessarily produce constitutional disturbance. The patient's health becomes gradually impaired; he loses both his appetite and natural rest and sleep; his pulse is small and frequent; and obstinate debilitating diarrhœa and profuse nocturnal sweats ensue. Such complaints are sooner or later followed by dissolution, unless the constitution be relieved in time, either by the amendment or removal of the diseased part. In different patients, however, the course of the disease, and its effects upon the system, vary very much in relation to the rapidity with which they occur.

Rheumatic white swellings are very distinct diseases from the *scrophulous distemper* of large joints. In the first, the pain is said never to occur without being attended with swelling. Scrophulous white swellings, on the other hand, are always preceded by a pain, which is particularly confined to one point of the articulation. In rheumatic cases, the pain is more general, and diffused over the whole joint.

With respect to the particular causes of all such white swellings as come within the class of rheumatic ones, little is known. External irritation, either by exposure to damp or cold, or by the application of violence, is often concerned in bringing on the disease; but very frequently no cause of this kind can be assigned for the complaint. As for scrophulous white swellings, there can be no doubt that they are under the influence of a particular kind of constitution, termed a *scrophulous* or *strumous* habit. In this sort of temperament, every cause capable of exciting inflammation, or any morbid and irritable state of a large joint, may bring such disorder as may end in the severe disease of which we are now speaking.

In a man of a sound constitution, an irritation of the kind alluded to might only induce common healthy inflammation of the affected joint.

In scrophulous habits, it also seems probable that the irritation of a joint is much more easily produced than in the other constitutions; and no one can doubt that, when once excited in scrophulous habits, it is much more dangerous and difficult of removal than in other patients.

HYDATID. (*Hydatis*; from ὕδωρ, water.) A very singular animal, formed like a bladder, and distended with an aqueous fluid. These animals are sometimes formed in the natural cavities of the body, as the abdomen and ventricles of the brain, but more frequently in the liver, kidney, and lungs, where they produce diseased actions of those viscera. Cullen arranges these affections in the class *locales*, and order *tumores*. If the vires naturæ medicatrices are not sufficient to effect a cure, the patient mostly falls a sacrifice to their ravages. Dr. Baillie gives the following interesting account of the hydatids, as they are sometimes found in the liver: — "There is no gland in the human body in which hydatids are so frequently found as the liver, except the kidneys, where they are still more common. Hydatids of the liver are usually found in a cyst, which is frequently of considerable size, and is formed of very firm materials, so as to give to the touch almost the feeling of cartilage. This cyst, when cut into, is obviously laminated, and is much thicker in one liver than another. In some livers it is not thicker than a shilling, and in others it is near a quarter of an inch in thickness. The laminæ which compose it are formed of a white matter, and on the inside there is a lining of a pulpy substance, like the coagulable lymph. The cavity of the cyst, I have seen, in one instance, subdivided by a partition of this pulpy substance. In a cyst may be found one hydatid, or a greater number of them. They lie loose in the cavity, swimming in a fluid; or some of them are attached to the side of the cyst, They consist of a round bag, which is composed of a white, semi-opaque, pulpy matter, and contain a fluid capable of coagulation. Although the common colour of hydatids be white, yet I have occasionally seen some of a light amber colour. The bag of the hydatid consists of two laminæ, and possesses a good deal of contractile power. In one hydatid this coat, or bag, is much thicker and more opaque than in another; and even in the same hydatid, different parts of it will often differ in thickness. On the inside of an hydatid, smaller ones are sometimes found, which are commonly not larger than the heads of pins, but sometimes they are even larger in their size than a gooseberry. These are attached to the larger hydatid, either at scattered irregular distances, or so as to form small clusters; and they are also found floating loose in the liquor of the larger hydatids. Hydatids of the liver are often found unconnected with each other; but sometimes they have been said to enclose each other in a series, like pill-boxes. The most common situation of hydatids of the liver is in its substance, and enclosed in a cyst; but they are occasionally attached to the outer surface of the liver, hanging from it, and occupying more or less of the general cavity of the abdomen. The origin and real nature of these hydatids are not fully ascertained; it is extremely probable, however, that they are a sort of imperfect animalcules. There is no doubt at all, that the hydatids in the livers of sheep are animalcules; they have been often seen to move when taken out of the liver and put into warm water; and they retain this power of motion for a good many hours after a sheep has been killed. The analogy is great between hydatids in the liver of a sheep and those of the human subject. In both, they are contained in strong cysts, and in both they consist of the same white pulpy matter. There is undoubtedly some difference between them in simplicity of organization: the hydatid in the human liver being a simple uniform bag, and the hydatid in that of a sheep having a neck and mouth appendant to the bag. This difference need be no considerable objection to the opinion above stated. Life may be conceived to be attached to the most simple form of organization. In proof of this, hydatids have been found in the brains of sheep, resembling almost exactly those in the human liver, and which have been seen to move, and therefore are certainly known to be animalcules. The hydatids of the human liver, indeed have not, as far as I know, been found to move when taken out of the body and put into warm water; were this to have happened, no uncertainty would remain. It is not difficult to see a good reason why there will hardly occur any proper opportunity of making this experiment. Hydatids are not very often found in the liver, because it is not a very frequent disease there; and the body is allowed to remain for so long a time after death before it is examined, that the hydatids must have lost their living principle, even if they were animacules: and it appears even more difficult to account for their production, according to the common theory of generation, than for that of intestinal worms. We do not get rid of the difficulty by asserting, that hydatids in the human liver are not living animals, because in sheep they are certainly such, where the difficulty of accounting for their production is precisely the same.

HY′DRAGOGUES. (*Medicamenta hydragoga*; from ὕδωρ, water, and αγω, to drive out.) Medicines are so termed which possess the property of increasing the secretions or excretions of the body, so as to cause the removal of water from any of its cavities, such as cathartics, &c.

HYDRA′RGYRI NITRICO-O′XYDUM. *Nitrico oxydum hydrargyri. Hydrargyrus nitratus ruber. Mercurius corrosivus ruber. Mercurius præcipitatus corrosivus.* Nitric oxide of mercury. Red precipitate. "Take of purified mercury, by weight, three pounds: of nitric acid, by weight, a pound and a half: of distilled water two pints. Mix in a glass vessel, and boil the mixture in a sand-bath, until the mercury be dissolved, the water also evaporated, and a white mass remain. Rub this into powder, and put it into another shallow vessel, then apply a moderate heat, and raise the fire gradually, until red vapour shall cease to rise." This preparation is very extensively employed by surgeons as a stimulant and escharotic, but its extraordinary activity does not allow of its being given internally. Finely levigated and mixed with common cerates, it is an excellent application to indolent ulcers, especially those which remain after burns and scalds, and those in which the granulations are indolent and flabby. It is also an excellent caustic application to chancres.

HY′DRARGYRI O′XYDUM CINE′REUM. *Oxydum hydrargyri cinereum. Oxydum hydrargyri nigrum.* The grey or black oxide of mercury has received several names. *Æthiops per se. Pulvis mercurialis cinereus. Mercurius cinereus. Turpethum nigrum. Mercurius præcipitatus niger.*

"Take of submuriate of mercury, an ounce; limewater, a gallon. Boil the submuriate of mercury in the lime-water, constantly stirring, until a grey oxide of mercury is separated. Wash this with distilled water, and then dry it." The dose from gr. ii. to x. There are four other preparations of it in high estimation:

One made by rubbing mercury with mucilage of gum-arabic. Plenk, of Vienna, has written a treatise on the superior efficacy of this medicine. It is very troublesome to make; and does not appear to possess more virtues than some other mercurial preparations.

Another made by triturating equal parts of sugar and mercury together.

The third, composed of honey or liquorice and purified mercury.

The fourth is the blue mercurial ointment.

All these preparations possess anthelmintic, antisyphilitic, alterative, sialagogue, and deobstruent virtues, and are exhibited in the cure of worms, syphilis, amenorrhœa, diseases of the skin, chronic diseases, obstructions of the viscera, &c.

HYDRA'RGYRI O'XYDUM RU'BRUM. *Oxydum hydrargyri rubrum. Hydrargyrus calcinatus.* Red oxide of mercury. "Take of purified mercury by weight a pound. Pour the mercury into a glass mattrass, with a very narrow mouth and broad bottom. Apply a heat of 600° to this vessel, without stopping it, until the mercury has changed into red scales: then reduce these to a very fine powder."

The whole process may probably require an exposure of six weeks.

This preparation of mercury is given with great advantage in the cure of syphilis. Its action, however, is such, when given alone, on the bowels, as to require the addition of opium, which totally prevents it. It is also given in conjunction with opium and camphire, as a diaphoretic, in chronic pains and diseases of long continuance.

It is given as an alterative and diaphoretic from gr. ss. to ii, every night, joined with camphor and opium, each gr. one-fourth or one-half. It is violently emetic and cathartic in the dose of gr. iv. to gr. v.

HYDRA'RGYRI OXYMU'RIAS. *Oxymurias hydrargyri. Hydrargyrus muriatus.* Oxymuriate of mercury. "Take of purified mercury by weight two pounds, sulphuric acid by weight thirty ounces, dried muriate of soda four pounds. Boil the mercury with the sulphuric acid in a glass vessel until the sulphate of mercury shall be left dry. Rub this, when it is cold, with the muriate of soda in an earthen-ware mortar; then sublime it in a glass cucurbit, increasing the heat gradually."

An extremely acrid and violently poisonous preparation.

Given internally in small doses properly diluted, and never in the form of pill, it possesses antisyphilitic, and alterative virtues. Externally, applied in form of lotion, it facilitates the healing of venereal sores, and cures the itch. In gargles for venereal ulcers in the throat the oxymuriate of mercury gr. iii. or iv., barley decoction ℔j., honey of roses ℥jj., proves very serviceable; also in cases of tetters, from gr. v. to gr. x. in water ℔j.; and for films and ulcerations of the cornea, gr. i. to water ℥iv.

Mr. Pearson remarks that when the sublimate is given to cure the primary symptoms of syphilis, it will sometimes succeed; more especially, when it produces a considerable degree of soreness of the gums, and the common specific effects of mercury in the animal system. But it will often fail of removing even a recent chancre; and where that symptom has vanished during the administration of corrosive sublimate, I have known, says he, a three month's course of that medicine fail of securing the patient from a constitutional affection. The result of my observations is, that simple mercury, calomel or calcined mercury, are preparations more to be confided in for the cure of primary symptoms, than corrosive sublimate. The latter will often check the progress of secondary symptoms very conveniently, and I think it is peculiarly efficacious in relieving venereal pains, in healing ulcers of the throat, and in promoting the desquamation of eruptions. Yet even in these cases it never confers permanent benefit; for new symptoms will appear during the use of it; and on many occasions it will fail of affording the least advantage to the patient from first to last. I do, sometimes, indeed, employ this preparations in venereal cases; but it is either at the beginning of a mercurial course, to bring the constitution under the influence of mercury at an early period, or during a course of inunction, with the intention of increasing the action of simple mercury. I sometimes also prescribe it after the conclusion of a course of friction, to support the mercurial influence in the habit, in order to guard against the danger of a relapse. But on no occasion whatever do I think it safe to confide in this preparation singly and uncombined for the cure of any truly venereal symptom."

A solution of it is ordered in the pharmacopœia, termed *Liquor hydrargyri oxymuriatis.* Solution of oxymuriate of mercury. "Take of oxymuriate of mercury, eight grains; distilled water, fifteen fluid-ounces; rectified spirit, a fluid-ounce. Dissolve the oxymuriate of mercury in the water, and add the spirit."

This solution is directed in order to facilitate the administration of divisions of the grain of this active medicine. Half an ounce of it contains one-fourth of a grain of the salt. The dose is from one drachm to half an ounce.

HYDRA'RGYRI SUBMU'RIAS. *Submurias hydrargyri.* Submuriate of mercury. *Calomelas.* Calomel. "Take of oxymuriate of mercury, a pound; purified mercury, by weight nine ounces. Rub them together until the metallic globules disappear, then sublime; take out the sublimed mass, and reduce it to powder, and sublime it in the same manner twice more successively. Lastly, bring it into the state of very fine powder by the same process which has been directed for the preparation of chalk."

Submuriate, or mild muriate of mercury, is one of the most useful preparations of mercury. As an anti-venereal it is given in the dose of a grain night and morning, its usual determination to the intestines being prevented, if necessary, by opium. It is the preparation which is perhaps most usually given in the other diseases in which mercury is employed, as in affections of the liver, or neighbouring organs, in cutaneous diseases, chronic rheumatism, tetanus, hydrophobia, hydrocephalus, and febrile affections, especially those of warm climates. It is employed as a cathartic alone, in doses from v. to xii. grains, or to promote the operation of other purgatives. Its anthelmintic power is justly celebrated; and it is perhaps superior to the other mercurials in assisting the operation of diuretics in dropsy. From its specific gravity it ought always to be given in the form of a bolus or pill.

HYDRA'RGYRI SULPHURE'TUM NIGRUM. *Hydrargyrus cum sulphure.* Æthiop's mineral. "Take of purified mercury, sublimed sulphur, each a pound, by weight. Rub them together, till the metallic globules disappear." Some suppose that the mercury is oxidized in this process, but that is not confirmed by the best experiments. The mercury, by this admixture of the sulphur, is deprived of its salivating power, and may be administered with safety to all ages and constitutions, as an anthelmintic and alterative.

HYDRA'RGYRI SULPHURE'TUM RU'BRUM. *Hydrargyrus sulphuratus ruber.* Red sulphuret of mercury. *Minium purum. Minium Græcorum. Magnes epilepsiæ. Atzemafor. Amnion. Azamar.* Vitruvius calls it *anthrax.* A red mineral substance composed of mercury combined with sulphur. It is either native or factitious. The native is an ore of quicksilver moderately compact, and of an elegant striated red colour. It is found in the dutchy of Deuxponts, in the Palatinate, in Spain, South America, &c. It is called native vermilion, and cinnabar in flowers. The factitious is thus prepared: "Take of purified mercury, by weight forty ounces; sublimed sulphur, eight ounces. Having melted the sulphur over the fire, mix in the mercury, and as soon as the mass begins to swell, remove the vessel from the fire, and cover it with considerable force to prevent inflammation; then rub the mass into powder, and sublime." This preparation is esteemed a mild mercurial alterative, and given to children in small doses. Hoffman greatly recommends it as a sedative and antispasmodic. Others deny that cinnabar taken internally, has any medicinal quality; and their opinion is grounded on the insolubility of it in any menstruum. In surgery its chief and almost only use is in the administration of quicksilver by fumigation. Thus employed it has proved extremely serviceable in venereal cases. Ulcers and excrescences about the pudendum and anus in women, are particularly benefited by it; and in these cases it is most conveniently applied by placing a red hot heater at the bottom of a night stool-pan, and after sprinkling on it a few grains of the red sulphuret of quicksilver, placing the patient on the stool. To fumigate ulcers in the throat, it is necessary to receive the fumes on the part affected, through the tube of a funnel. By enclosing the patient naked in a box, it has on some occasions been contrived to fumigate the whole body at once, and in this way the specific powers of the quicksilver have been very rapidly excited.

This mode of curing the lues venerea, is spoken of as confirmed; and the subject has of late years been revived in a treatise by Sabonette, and by trials made in Bartholomew's hospital.

Mr. Pearson, from his experiments on mercurial fumigation, concludes, that where checking the progress of the disease suddenly, is an object of great moment, and where the body is covered with ulcers or large and numerous eruptions, and in general to ulcers, fungi, and excrescences, the vapour of mercury is an application of great efficacy and utility; but that it is apt to induce a ptyalism rapidly, and great consequent debility, and that for the purpose of securing the constitution against a relapse, as great a quantity of mercury must be introduced into the system, by inunction, as if no fumigation had been employed.

HYDRA'RGYRUM. *Hydrargyrus.* (*υδραργυρος*: from *υδωρ*, water, and *αργυρας*, silver, so named from its having a resemblance to fluid silver.) See *Mercury.*

HYDRA'RGYRUS CUM CRE'TA. Mercury with chalk. *Mercurius alkalizatus.* "Take of purified mercury, by weight three ounces; prepared chalk, five ounces. Rub them together, until the metallic globules disappear." This preparation is milder than any other mercurial, except the sulphuret, and does not so easily act upon the bowels; it is therefore used largely by many practitioners, and possesses alterative properties in cutaneous and venereal complaints, in obstructions of the viscera, or of the prostate gland, given in the dose of ℈ss to ʒss, two or three times a day.

HYDRA′RGYRUM PRÆCIPITA′TUM A′LBUM. White precipitated mercury. *Calx hydrargyri alba.* "Take of oxymuriate of mercury, half a pound; muriate of ammonia, four ounces; solution of subcarbonate of potash, half a pint; distilled water, four pints. First dissolve the muriate of ammonia, then the oxymuriate of mercury, in the distilled water, and add thereto the solution of subcarbonate of potash. Wash the precipitated powder until it becomes tasteless; then dry it." It is only used externally, in the form of ointment, as an application in some cutaneous affections.

HYDRA′RGYRUM PURIFICA′TUM. Purified mercury. *Argentum vivum purificatum.* "Take of mercury, by weight, six pounds; iron filings, a pound. Rub them together, and distil the mercury from an iron retort, by the application of heat to it." Purified quicksilver is sometimes administered in its metallic state, in doses of an ounce or more, in constipation of the bowels.

HYDRA′RGYRUS ACETA′TUS. *Mercurius acetatus. Pilulæ Keyseri.* By this preparation of mercury, the celebrated Keyser acquired an immense fortune in curing the venereal disease. It is an acetate of mercury, and therefore termed *hydrargyri acetas* in the new chemical nomenclature. The dose is from three to five grains. Notwithstanding the encomium given to it by some, it does not appear to be so efficacious as some other preparations of mercury.

HYDRA′RGYRUS PHOSPHORA′TUS. This remedy has been observed to heal inveterate venereal ulcers in a very short time, nay, in the course of a very few days, particularly those about the pudenda. In venereal inflammations of the eyes, chancres, rheumatisms, and chronic eruptions, it has proved of eminent service. Upon the whole, if used with necessary precaution, and in the hands of a judicious practitioner, it is a medicine mild and gentle in its operation. The cases in which it deserves the preference over other mercurial preparations, are these: in an inveterate stage of syphilis, particularly in persons of torpid insensible fibres; in cases of exostosis, as well as obstructions in the lymphatic system; in chronic complaints of the skin.

The following is the formula. ℞ Hydrargyri phosphorati, gr. iv. Corticis cinnamoni in pulverem triti, gr. xiv. Sacchari purif. ʒss. Misce. The whole to be divided into eight equal parts, one of which is to be taken every morning and evening, unless salivation takes place, when it ought to be discontinued. Some patients, however, will bear from one to two grains of the phosphate of quicksilver, without inconvenience.

HYDRA′RGYRUS PRECIPITA′TUS CINE′REUS. This preparation is an oxide of mercury, and nearly the same with the *hydrargyri oxydum cinereum* of the London pharmacopœia; it is used as an alterative in cases of pains arising from an admixture of rheumatism with syphilis. It may be substituted for the hydrargyrus sulphuratus ruber, in fumigating ozæna, and venereal ulcerated sore throat, on account of its not yielding any vapour offensive to the patient.

HYDRA′RGYRUS VITRIOLA′TUS. *Turpethum minerale. Mercurius emeticus flavus. Sulphas hydrargyri.* Formerly this medicine was in more general use than in the present day. It is a very powerful and active alterative when given in small doses. Two grains act on the stomach so as to produce violent vomitings. It is recommended as an errhine in cases of amaurosis. In combination with antimony it acts powerfully on the skin.

Hydrelæ′um. (From *υδωρ*, water, and *ελαιον*, oil.) A mixture of oil and water.

Hydrenteroce′le. (From *υδωρ*, water, *εντερον*, an intestine, and *κηλη*, a tumour.) A dropsy of the scrotum, attended with rupture.

Hydro′a. (From *υδωρ*, water.) A watery pustule.

Hydrocarbonate. See *Carburetted hydrogen gas.*

HYDROCA′RDIA. (From *υδωρ*, water, and *καρδια*, the heart.) *Hydrocordis. Hydrops pericardii.* Dropsy of the heart. Dropsy of the pericardium. A collection of fluid in the pericardium, which may be either coagulable lymph, serum, or a puriform fluid. It produces symptoms similar to those of hydrothorax, with violent palpitation of the heart, and mostly an intermittent pulse. It is incurable.

HYDROCE′LE. (From *υδωρ*, water, and *κηλη*, a tumour.) The term *hydrocele*, used in a literal sense, means any tumour produced by water; but surgeons have always confined it to those which possess either the membranes of the scrotum, or the coats of the testicle and its vessels. The first of these, viz. that which has its seat in the membranes of the scrotum, anasarca integumentorum, is common to the whole bag, and to all the cellular substance which loosely envelopes both the testes. It is, strictly speaking, only a symptom of a disease, in which the whole habit is most frequently more or less concerned, and very seldom affects the part only. The latter, or that which occupies the coats immediately investing the testicle and its vessels, hydrocele tunicæ vaginalis, is absolutely local, very seldom affects the common membrane of the scrotum, generally attacks one side only; and is frequently found in persons who are perfectly free from all other complaints.

The anasarca integumentorum retains the impression of the finger. The vaginal hydrocele has an undulating feel.

The hydrocele of the tunica vaginalis testis is a morbid accumulation of the water separated on the internal surface of the tunica vaginalis, to moisten or lubricate the testicle.

From its first appearance, it seldom disappears, or diminishes, but generally continues to increase, sometimes rapidly, at others more slowly. In some, it grows to a painful degree of distension in a few months: in others, it continues many years with little disturbance. As it enlarges, it becomes more tense, and is sometimes transparent; so that if a candle is held on the opposite side, a degree of light is perceived through the whole tumour; but the only certain distinction is the fluctuation, which is not found when the disease is an hernia of the omentum, or intestines, or an inflammatory or a scirrhous tumour of the testicle.

Hydroce′le cysta′ta. Encysted hydrocele of the spermatic cord resembles the common hydrocele; but the tumour does not extend to the testicle, which may be felt below or behind it, while, in the hydrocele of the vaginal coat, when large, the testicle cannot be discovered. In this disease also, the penis is not buried in the tumour. Sometimes the fluid is contained in two distinct cells; and this is discovered by little contractions in it. It is distinguished from the anasarcous hydrocele by a sensible fluctuation, and the want of the inelastic pitting; from hernia, by its beginning below, from its not receding in an horizontal position, and not enlarging by coughing and sneezing.

Hydroce′le funi′culi sperma′tici, or hydrocele of the spermatic cord. Anasarcous hydrocele of the spermatic cord sometimes accompanies ascites, and, at other times, it is found to be confined to the cellular substance, in or about the spermatic cord. The causes of this disease may be obstructions in the lymphatics, leading from the part, in consequence of scirrhous affections of the abdominal viscera, or the pressure of a truss applied for the cure of hernia.

When the affection is connected with anasarca in other parts, it is then so evident as to require no particular description. When it is local, it is attended with a colourless tumour in the course of the spermatic cord, soft and inelastic to the touch, and unaccompanied with fluctuation. In an erect position of the body, it is of an oblong figure; but when the body is recumbent, it is flatter, and somewhat round. Generally it is no longer than the part of the cord which lies in the groin; though sometimes it extends as far as the testicle, and even stretches the scrotum to an uncommon size. By pressure, a great part of the swelling can always be made to recede into the abdomen. It instantly, however, returns to its former situation, on the pressure being withdrawn.

Hydroce′le peritonæ′i. Ascites, or common dropsy of the belly.

Hydroce′le spina′lis. A watery swelling on the vertebræ.

Hydrocelo′des ischu′ria. (From υδωρ, water, and κηλωδης, attended with tumour.) Applied to a suppression of urine, from a rupture of the urethra.

HYDROCE′PHALUS. (From ὑδωρ, water, and κεφαλη, the head.) *Hydrocephalum.* Dropsy of the brain. Dropsy of the head. A genus of disease arranged by Cullen, in the class *cachexiæ,* and order *intumescentiæ.* It is distinguished by authors into external and internal: 1. *Hydrocephalus externus,* is a collection of water between the membranes of the brain. 2. *Hydrocephalus internus,* is when a fluid is collected in the ventricles of the brain, producing dilatation of the pupils, apoplexy, &c. See *Apoplexia.* It is sometimes of a chronic nature, when the water has been known to increase to an enormous quantity, effecting a diastasis of the bones of the head, and an absorption of the brain.

Pain in the head, particularly across the brow, stupor, dilatation of the pupils, nausea, vomiting, preternatural slowness of the pulse, and convulsions, are the pathognomic symptoms of this disease, which have been laid down by the generality of writers.

Hydrocephalus is almost peculiar to children, being rarely known to extend beyond the age of twelve or fourteen; and it seems more frequently to arise in those of a scrophulous and ricketty habit than in others. It is an affection which has been observed to pervade families, affecting all or the greater part of the children at a certain period of their life; which seems to show that, in many cases, it depends more on the general habit than on any local affection, or accidental cause.

The disease has generally been supposed to arise in consequence either of injuries done to the brain itself, by blows, falls, &c. from scirrhous tumours or excrescences within the skull, from original laxity or weakness in the brain, or from general debility and an impoverished state of the blood.

With respect to its proximate cause, very opposite opinions are still entertained by medical writers, which, in conjunction with the equivocal nature of its symptoms, prove a source of considerable embarrassment to the young practitioner.

Dr. Beddoes says, he believes it to belong to inflammation, and that, at an early period, he should be inclined to bleed as largely as in pneumonia.

Dr. Withering observes, that, in a great many cases, if not in all, congestion, or slight inflammation, are the precursors to the aqueous accumulation.

Dr. Rush thinks that, instead of its being considered an idiopathic dropsy, it should be considered only as an effect of a primary inflammation or congestion of blood in the brain. It appears, says he, that the disease, in its first stage, is the effect of causes which produce a less degree of that inflammation which constitutes phrenitis; and that its second stage is a less degree of that effusion which produces serous apoplexy in adults. The former partakes of the nature of the chronic inflammation of Dr. Cullen, and the asthenic inflammation of Dr. Brown. — There are others again who view the subject in a very different light. Dr. Darwin supposes inactivity, or torpor of the absorbent vessels of the brain, to be the cause of hydrocephalus internus; but he confesses, in another part of his work, that the torpor of the absorbent vessels may often exist as a secondary effect.

Dr. Whytt, who has published an ingenious treatise on the disease, observes, the immediate cause of every kind of dropsy is the same; viz. such a state of the parts as makes the exhalent arteries throw out a greater quantity of fluids than the absorbents can take up. From what he afterwards mentions, he evidently considers this state as consisting in debility.

As many cases are accompanied with an increased or inflammatory action of the vessels of the brain, and others again are observed to prevail along with general anasarca, it seems rational to allow that hydrocephalus is, in some instances, the consequence of congestion, or slight inflammation in the brain; and that, in others, it arises either from general debility or topical laxity. In admitting these as incontrovertible facts, Dr. Thomas is, at the same time, induced to suppose that the cases of it occurring from mere debility are by no means frequent.

The great analogy subsisting between the symptoms which are characteristic of inflammation, and those which form the first stage of the acute species of hydrocephalus, (for the disease, as already observed, has been divided into the chronic and acute by some writers,) together with the good effects often consequent on blood-letting, and the inflammatory appearance which the blood frequently exhibits, seem to point out strong proof of the disease being, in most instances, an active inflammation, and that it rarely occurs from mere debility, as a primary cause.

The progress of the disorder has, by some, been divided into three stages.

When it is accompanied by an increased or inflammatory action of the brain, as not uncommonly happens, its first stage is marked with many of the symptoms of pyrexia, such as langour, inactivity, loss of appetite, nausea, vomiting, parched tongue, hot, dry skin, flushing of the face, head-ach, throbbing of the temporal arteries, and quickened pulse; which symptoms always suffer an exacerbation in the evening, but towards morning become milder.

When it is unaccompanied by any inflammatory action of the brain, many of these appearances are not to be observed. In these cases, it is marked by a dejection of countenance, loss of appetite, pains over the eyes, soreness of the integuments of the cranium to the touch, propensity to the bed, aversion to being moved, nausea, and costiveness. The disease, at length, makes a remarkable transition, which denotes the commencement of its second stage. The child screams out, without being able to assign any cause; its sleep is much disturbed; there is a considerable dilatation of the pupils of the eyes, without any contraction on their being exposed to light; lethargic torpor, with strabismus, or perhaps double vision ensues, and the pulse becomes slow and unequal.

In the third stage, the pulse returns again to the febrile state, becoming uncommonly quick and variable; and coma, with convulsions, ensue. When the accumulation of water is very great, and the child young, the sutures recede a considerable way from each other, and the head, towards the end, becomes much enlarged.

When recoveries have actually taken place in hydrocephalus, we ought probably to attribute more to the efforts of nature than to the interference of art. In every instance it is to be regarded as of difficult cure.

An accumulation of water in the ventricles of the brain, is one of the most common appearances to be observed on dissection. In different cases, this is accumulated in greater or less quantities. It sometimes amounts only to a few ounces, and occasionally to some pints. When the quantity of water is considerable, the fornix is raised at its anterior extremity, in consequence of its accumulation, and an immediate opening of communication is thereby formed between the lateral ventricles. The water is of a purer colour and more limpid than what is found in the dropsy of the thorax, or abdomen. It appears, however, to be generally of the same nature with the water that is accumulated in these cavities. In some instances, the water in hydrocephalus, contains a very small proportion of coagulable matter, and in others it is entirely free from it.

When the water is accumulated to a very large quantity in the ventricles, the substance of the brain appears to be a sort of pulpy bag, containing a fluid. The skull, upon such occasions, is very much enlarged in size, and altered in its shape; and it appears exceedingly large in proportion to the face. On removing the scalp, the bones are found to be very thin, and there are frequently broad spots of membrane in the bone. These appearances are, however, only to be observed where the disease has been of some years continuance.

In some cases, where the quantity of water collected is not great, the substance of the brain has appeared to be indurated, and in others softened. At times, the organ has been found gorged with blood; collections also of a viscid tenacious matter have been discovered in cysts, upon its external surface, and tumours have been found attached to its substance.

The treatment must be prompt and active to give a tolerable chance of success. The general indications are, in the first stage, to lessen the inflammatory action, afterwards to promote absorption. Should the patient be about the age of puberty, of a plethoric habit, and the symptoms run high at the beginning, it will be proper to take some blood, especially from the temporal artery, or the jugular vein; but, if younger, or the disease more advanced, a sufficient quantity may be withdrawn by leeches, applied to the temples, or in the direction of the sutures. The bowels must then be thoroughly evacuated by some active cathartic, as they are usually very torpid, calomel with scammony, or jalap, for example; and, in the progress of the complaint, this function must be kept up with some degree of activity. For this purpose, calomel may be given in divided doses, or some other mercurial preparation, which may not run off too rapidly, producing mere watery stools, but regularly clear out the bowels, as well as the liver, and promote the other secretions. Besides mercury is the most powerful remedy in rousing the absorbents, and some of the most remarkable cures of this disease, even at an advanced period, have been effected by it: whence it would be advisable, where the disease was proceeding rapidly, and particularly if the bowels were irritable, to use mercurial frictions, that the system might be sooner affected. Another very important step, after clearing the bowels, is to apply some evaporating lotion assiduously to the scalp, previously shaved; and the antiphlogistic regimen should be steadily observed. Diaphoretics will generally be proper, assisted by the warm bath; and diuretics on some occasions may be useful; but digitalis, which has been recommended on this ground, seems more likely to avail by lessening arterial action. Blisters may be applied to the temples, behind the ears, or to the nape of the neck, each perhaps successively; and dressed with savine cerate occasionally, to increase the discharge, and irritation externally: issues appear not so likely to prove beneficial. Errhines may farther contribute to obviate internal effusion. Electricity has been proposed to rouse the absorbents in the second stage; but its efficacy, and even propriety, is very doubtful. Should the progress of the complaint be fortunately arrested, the strength must be established by a nutritious diet, and tonic medicines; taking care to keep the bowels in good order, and the head cool; an issue, under these circumstances, may be a very useful remedy.

Hydroce′phalus acu′tus. See *Hydrocephalus.*

Hydroce′phalus exte′rnus. Water between the brain and its membranes.

Hydroce′phalus inte′rnus. Water in the ventricles of the brain.

HYDROCO′TYLE. (From υδωρ, water, and κοτυλη, the cotula.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The name, in some pharmacopœias, for the common marsh or water cotula, or penny-wort, which is said to possess acrid qualities.

Hydrocy′stis. (From υδωρ, water, and κυϛις, a vesicle.) An encysted dropsy.

HY′DROGEN. (*Hydrogenium;* from υδωρ, water, and γινομαι, to become, or γενναω, to produce, because with oxygen it produces water.) Base of *inflammable air.*

Hydrogen is a substance not perceptible to our sensations in a separate state; but its existence is not at all the less certain. Though we cannot exhibit it experimentally uncombined, we can pursue it while it passes out of one combination into another; we cannot, indeed, arrest it on its passage, but we never fail to discover it, at least if we use the proper chemical means, when it presents itself to our notice in a new compound.

Hydrogen, as its name expresses, is one of the constituent elements of water. Its existence was unknown till lately. It is plentifully distributed in nature, and acts a very considerable part in the processes of the animal and vegetable economy. It is one of the ingredients in the varieties of bitumen, oils, fats, ardent spirit, ether, and, in fact, all the proximate component parts of animal and vegetable bodies. It forms a constituent part of all animal and vegetable acids. It is one of the constituents of ammonia and of various other compound gases.

It possesses so great an affinity for caloric, that it can only exist separately in the state of gas; it is consequently impossible to procure it in the concrete or liquid state, independent of combination.

Solid hydrogen, therefore, united to caloric and light, forms hydrogen gas, *Properties of Hydrogen Gas.*

This gas, which was formerly called inflammable air, was discovered by Mr. Cavendish, in the year 1768, or rather he first obtained it in a state of purity, and ascertained its more important properties, though it had been noticed long before. The famous philosophical candle attests the antiquity of this discovery.

Hydrogen gas, like oxygen gas, is a triple compound, consisting of the ponderable base of hydrogen, caloric, and light. It possesses all the mechanical properties of atmospheric air. It is the lightest substance whose weight we are able to estimate: when in its purest state, and free from moisture, it is about fourteen times lighter than atmospheric air. It is not fitted for respiration; animals, when obliged to breathe in it, die almost instantaneously. It is decomposed by living vegetables, and its basis becomes one of the constituents of oil, resin, &c. It is inflammable, and burns rapidly when kindled, *in contact with atmospheric air or oxygen gas*, by means of the electric spark, or by an inflamed body; and burns, when pure, with a yellowish lambent flame; but all burning substances are immediately extinguished when immersed in it. It is, therefore, incapable of supporting combustion. It is not injurious to growing vegetables. It is unabsorbable by most substances: water absorbs it very sparingly. It is capable of dissolving carbon, sulphur, phosphorus, arsenic, and many other bodies. When its basis combines with that of oxygen gas, water is formed; with nitrogen it forms ammonia. It does not act on earthy substances.

Method of obtaining Hydrogen Gas.—A ready method of obtaining hydrogen gas consists in subjecting water to the action of a substance which is capable of decomposing this fluid.

1. For this purpose, let sulphuric acid, previously diluted with four or five times its weight of water, be poured on iron filings, or bits of zinc, in a small retort, or gas-bottle, called a pneumatic flask, or proof; as soon as the diluted acid comes in contact with the metal, a violent effervescence takes place, and hydrogen gas escapes without external heat being applied. It may be collected in the usual manner over water, taking care to let a certain portion escape, on account of the atmospheric air contained in the disengaging vessels.

The production of hydrogen gas in the above way is owing to the decomposition of water. The iron, or zinc, when in contact with this fluid, in conjunction with sulphuric acid, has a greater affinity to oxygen than the hydrogen has; the oxygen, therefore, unites to it, and forms an oxid of that metal which is instantly attacked and dissolved by the acid; the other constituent part of the water, the hydrogen, is set free, which, by uniting with caloric, assumes the form of hydrogen gas. The oxygen is, therefore, the bond of union between the metal and the acid.

The hissing noise, or effervescence, observable during the process, is owing to the rapid motion excited in the mixture by means of the great number of air-bubbles quickly disengaged and breaking at the surface of the fluid.

We see, also, in this case, that *two* substances exert an attraction, and are even capable of decomposing jointly a *third*, which neither of them is able to do singly, *viz.*; if we present sulphuric acid alone, or iron or zinc alone, to water, they cannot detach the oxygen from the hydrogen of that fluid; but, if both are applied, a decomposition is instantly effected. This experiment, therefore, proves that the agency of chemical affinity between two or more bodies may lie dormant, until it is called into action by the interposition of another body, which frequently exerts no energy upon any of them in a separate state. Instances of this kind were formerly called *predisposing affinities.*

2. Iron, in a red heat, has also the property of decomposing water, by dislodging the oxygen from its combination with hydrogen, in the following manner: —

Let a gun-barrel, having its touch-hole screwed up, pass through a furnace, or large crucible perforated for that purpose, taking care to incline the barrel at the narrowest part; adjust to its upper extremity a retort charged with water, and let the other extremity terminate in a tube introduced under a receiver in the pneumatic trough. When the apparatus is thus disposed, and well luted, bring the gun-barrel to a red heat, and, when thoroughly red-hot, make the water in the retort boil; the vapour, when passing through the red-hot tube, will yield hydrogen gas abundantly. In this experiment, the oxygen of the water combines with the iron at a red heat, so as to convert it into an oxid, and the caloric applied combines with the hydrogen of the water, and forms hydrogen gas. It is, therefore, the result of a double affinity, that of the oxygen of the water for the metal, and that of its hydrogen for caloric.

The more caloric is employed in the experiment of decomposing water by means of iron, &c. the sooner is the water decomposed.

Hydrogen gas combined with carbon, is frequently found in great abundance in mines and coal-pits, where it is sometimes generated suddenly, and becomes mixed with the atmospheric air of these subterraneous cavities. If a lighted candle be brought in, this mixture often explodes, and produces the most dreadful effects. It is called, by miners, *fire-damp.* It generally forms a cloud in the upper part of the mine, on account of its levity, but does not mix there with atmospheric air, unless some agitation takes place. The miners frequently set fire to it with a candle, lying at the same time flat on their faces to escape the violence of the shock. An easier and more safe method of clearing the mine, is by leading a long tube through the shaft of it, to the ash-pit of a furnace; by this means the gas will be conducted to feed the fire.

Sir Humphrey Davy has invented a valuable instrument, called a *safety lamp*, which will enable the miners to convey a light into such impure air without risk. This is founded on the important discovery, made by him, that flame is incapable of passing through minute apertures in a metallic substance, which yet are pervious to air: the reason of which appears to be, that the ignited gas, or vapour, is so much cooled by the metal in its passage, as to cease being luminous.

Hydrogen gas, in whatever manner produced *always* originates from water, either in consequence of a preceding decomposition, by which it had been combined in the state of solid or fixed hydrogen, with one of the substances employed, or from a decomposition of water actually taking place during the experiment.

There are instances recorded of a vapour issuing from the stomach of dead persons, which took fire on the approach of a candle. We even find accounts, in several works of the combustion of living human beings, which appeared to be spontaneous. Dr. Swediaur has related some instances of porters at Warsaw, who having drank abundantly of spirit, fell down in the street, with the smoke issuing out of their mouths; and people came to their assistance, saying they would take fire; to prevent which, they made them drink a great quantity of milk, or used a more singular expedient, by causing them to swallow the urine of the bystanders, immediately on its evacuation.

However difficult it may be to give credit to such narratives, it is equally difficult to reject them entirely, without refusing to admit the numerous testimonies of men, who were, for the most part, worthy of credit. *Citizen Lair* has collected all the circumstances of this nature which he found dispersed in different books, and has rejected those which did not appear to be supported by respectable testimony, to which he has added some others related by persons still living. These narratives are nine in number; they were communicated to the Philomathic Society, at Paris, and inserted in the bulletin, Thermidor, An. 5, No. 29. The cause of this phenomenon has been attributed to a development of hydrogen gas taking place in the stomachs of these individuals.

Citizen Lair believes that the bodies of these people were not burned perfectly spontaneously, but it appeared to be owing to some very slight external cause, such as the fire of a candle, taper, or pipe.

HY'DROGEN GAS, SULPHURE'TTED. Sulphuretted hydrogen gas possesses the properties of an acid; for when absorbed by water, its solution reddens vegetable blues; it combines also with alkalies, earths, and with several metallic oxides. Sulphuretted hydrogen combined with any base, forms a *hydro-sulphuret*, which may be also called an *hepatule*, to distinguish it from an *hepar*, which is the union of sulphur singly with a base. Sulphuretted hydrogen gas possesses an extremely offensive odour, resembling that of putrid eggs. It kills animals, and extinguishes burning bodies. When in contact with oxygen gas, or atmospheric air, it is inflammable. Mingled with nitrous gas, it burns with a yellowish green flame. It is decomposed by ammonia, by oxy-muriatic acid gas and by sulphurous acid gas. It has a strong action on the greater number of metallic oxides. Its specific gravity is about 1.18 when pure. It is composed, according to Thomson, of sixteen parts of sulphur, and one of hydrogen. It has the property of dissolving a small quantity of phosphorus.

Sulphuretted hydrogen gas may be obtained in several ways: —

1. Take dry sulphuret of potash, put it into a tubulated retort, lodged in a sand-bath, or supported over a lamp; direct the neck of the retort under a receiver placed in the pneumatic trough; then pour gradually upon the sulphuret diluted sulphuric, or muriatic acid; a violent effervescence will take place, and sulphuretted hydrogen gas will be liberated. When no more gas is produced spontaneously, urge the mixture with heat, by degrees, till it boils, and gas will again be liberated abundantly.

The water made use of for receiving it, should be heated to about 80° or 90°; at this temperature it dissolves little of the gas: whereas, if cold water be made use of, a much greater quantity of it is absorbed.

Explanation. — Though sulphur makes no alteration on water, which proves that sulphur has less attraction for oxygen than hydrogen has, yet if sulphur be united to an alkali, this combination decomposes water whenever it comes in contact with it, though the alkali itself has no attraction either for oxygen or hydrogen.

The formation of this gas explains this truth. On adding the sulphuret of potash to the water, this fluid becomes decomposed, part of the sulphur robs it of its oxygen, and forms with it sulphuric acid, this generated acid unites to part of the alkali, and forms sulphate of potash. The liberated hydrogen dissolves another part of the sulphur, and forms with it sulphuretted hydrogen, the basis of this gas, which is retained by the separated portion of the alkali. The sulphuric or muriatic acid added now extricates it from the alkali, and makes it fly off in the form of gas.

Diluted muriatic acid seems best adapted for the production of sulphuretted hydrogen gas from alkaline sulphurets. If nitric acid be made use of it must be much diluted. Sulphuric acid yields little gas, unless assisted by heat. When the proportion of sulphur in the sulphuret exceeds that of the alkali, the dense sulphuric acid poured upon it emits sulphurous acid gas. All the rest of the acids may be made use of for decomposing the sulphurets.

2. When iron and sulphur are united together, they afford a large quantity of sulphuretted hydrogen gas, on submitting them to the action of heat, in contact with diluted muriatic acid.

Melt together, in a crucible, equal parts of iron filings and sulphur; the product is a black brittle mass, called sulphuret of iron. Reduce this to powder, and put it, with a little water, into a tubulated retort; add diluted muriatic acid, and apply a gentle heat, till no more gas is disengaged. The philosophy of this experiment is analagous to the former. Part of the oxygen of the water unites to part of the sulphur, and forms sulphuric acid; another part oxidizes the iron, which, dissolved by the acid, forms sulphate of iron: the hydrogen of the water unites to another part of the sulphur, and forms sulphuretted hydrogen, which becomes gaseous by the addition of caloric.

3. Sulphuretted hydrogen gas may also be obtained by heating an alkaline sulphuret, with the addition of water, without the aid of an acid. In this case, the water is also decomposed; its hydrogen unites with part of the sulphur, and forms sulphuretted hydrogen; the oxygen of the water unites with another part of the sulphur, and produces sulphuric acid, which joins to the alkali and forms a sulphate. The sulphuretted hydrogen becomes disengaged by heat in the gaseous form.

4. Sulphuretted hydrogen gas may be obtained by passing hydrogen gas through sulphur, in a state of fusion.

For this purpose, put sulphur into a gun-barrel, or Wedgwood's tube, and place it across a furnace; fit to the lower extremity a bent glass tube, which goes under a receiver placed in the pneumatic trough, and adapt to the upper extremity a tubulated retort, or other apparatus proper for producing hydrogen gas. The sulphur must then be heated, and, when melted, the hydrogen gas evolved must be made to pass over it, which, in this manner, will dissolve part of the sulphur, and become converted into sulphuretted hydrogen gas.

5. It may likewise be procured in the following direct manner: let a small quantity of sulphur be enclosed in a jar full of hydrogen gas, and melt it by means of a burning-glass. This method does not succeed except the hydrogen gas be as dry as possible, for its affinity to sulphur is weakened in proportion to its moisture.

6. The method, however, which affords it purest, is by treating sulphuret of antimony with diluted muriatic acid. The explanation is similar to the preceding processes.

HY'DROGEN GAS, PHOSPHURE'TTED. This gas consists of phosphorus dissolved in hydrogen gas.

Properties. — It is the most combustible substance in nature, and it is particularly distinguished from all other gases, by the property of taking fire immediately when brought in contact with atmospheric air. When mixed with oxygen gas, or with oxymuriatic acid gas, it burns with great vehemence. When bubbles of it are suffered to pass through water, they explode in succession as they reach the surface of this fluid. It has an insupportable odour, similar to that of putrid fish. It is partly absorbable by distilled water, freed from atmospheric air, at low temperatures, which takes up about one-third of its bulk, and gives it out again without alteration by heat. Water containing atmospheric air decomposes it, when suffered to stand with it for some time. When exposed to vivid light, it deposits phosphorus in a crystalline form.

Methods of obtaining it.

1. Take a small retort; put into it one part of phosphorus and ten of a concentrated solution of potash, or soda; make the mixture boil, and receive the liberated gas over mercury; or, if it be intended for immediate use, it may be collected over water. In this experiment, a decomposition of the water takes place. Its oxygen unites to part of the phosphorus, and forms phosphoric acid, which joins to the potash, and forms phosphate of potash. The liberated hydrogen dissolves another part of the phosphorus, and becomes converted into phosphuretted hydrogen gas.

In thus preparing this gas, the body of the retort should be filled as nearly as possible with the mixture, otherwise the first portion of gas which is produced in flames in the retort; a vacuum is formed, and the water forced up into the retort, which endangers the bursting of it.

2. Phosphuretted hydrogen gas is also obtained, if, by a direct exposure to a strong heat, we effect a combination of phosphorus and lime, and then throw this compound into water, a great quantity of phosphuretted hydrogen gas will soon be formed, and may be collected, in the usual manner, over water or mercury.

The production of phosphuretted hydrogen gas in this manner, is analogous to the first, with the only difference that here the decomposition of the water takes place at common temperatures.

3. Phosphuretted hydrogen gas may also be obtained, according to Davy, in the following manner:—

Let water be decomposed in the usual manner, by means of zinc and sulphuric acid, and add to the mixture a quantity of phosphorus. The hydrogen evolved will dissolve part of the phosphorus; phosphuretted hydrogen gas will be produced, and take fire at the surface of the fluid, so long as the decomposition of the water is made, with considerable rapidity. But the gas produced in this process burns with a more lambent flame than that obtained in the usual manner, probably on account of containing a larger quantity of hydrogen. The experiment is nevertheless brilliant, for the gas is disengaged in small bubbles, which cover the whole surface of the fluid; they disengage themselves rapidly, new ones are produced, and the whole fluid resembles a well of fire.

For the success of this experiment, it is essential that the water, during the action of its decomposition, be considerably heated, which may be effected by a copious addition of sulphuric acid, and that the phosphorus be present in a considerable quantity. Half a part of phosphorus cut into small pieces, one of granulated zinc, three of concentrated sulphuric acid, and five of water, answer this purpose exceedingly well.

Phosphuretted hydrogen gas is also produced by nature. The air which burns at the surface of certain springs, and forms what are called *burning-springs*, and the *ignes fatui* (Jack o'lanterns), which glide along burying-grounds, or places where animal matter is putrefying, consist of hydrogen gas, holding phosphorus in solution.

Hydrogen gaz, light carbonated. See *Carburetted hydrogen gas.*

Hydrogen gaz, heavy, carbonated. See *Carburetted hydrogen gas.*

HYDROLA′PATHUM. (From ὕδωρ, water, and λαπαθον, the dock.) See *Rumex hydrolapathum.*

HYDRO′MELI. (From ὕδωρ, water, and μελι, honey.) *Mulsum. Aqua Mulsa. Melicratum. Braggat. Hydromel.* Water impregnated with honey. After it is fermented, it is called vinous hydromel, or mead.

HYDROME′TRA. (From ὕδωρ, water, and μητρα, the womb.) *Hydrops uteri.* Dropsy of the womb. A genus of disease in the class *cachexiæ*, and order *intumescentiæ*, of Cullen. It produces a swelling of the hypogastric region, slowly and gradually increasing, resembling the figure of the uterus, yielding to, or fluctuating on, pressure; without ischury or pregnancy. Sauvages enumerates seven species. It must be considered as a very rare disease, and one that can with difficulty be ascertained.

HYDRO′MPHALUM. (From ὕδωρ, water, and ομφαλὸς, the navel.) A tumour of the navel containing water.

HYDRO′NOSOS. (From ὕδωρ, water, and νοσος, a disease.) The sweating-sickness, called Ephidrosis and Sudor anglicus.

HYDROPEDE′SIS. (From ὕδωρ, water, and πηδαω, to break out.) A breaking out into a violent sweat.

HYDROPHO′BIA. (From ὕδωρ, water, and φοϐεω, to fear.) *Rabies canina. Cynanthropia. Cynolesia.* Canine madness. This disease arises in consequence of the bite of a rabid animal, as a dog or cat, and sometimes spontaneously. It is termed hydrophobia, because persons that are thus bitten dread the sight or the falling of water when first seized. Cullen has arranged it under the class *neuroses*, and order *spasmi*, and defines it a loathing and great dread of drinking any liquids, from their creating a painful convulsion of the pharynx, occasioned most commonly by the bite of a mad animal.

There are two species of hydrophobia:

1. *Hydrophobia rabiosa*, when there is a desire of biting.

2. *Hydrophobia simplex*, when there is not a desire of biting.

Dr. James observes, that this peculiar affection properly belongs to the canine genus, viz. dogs, foxes, and wolves; in which animals only it seems to be innate and natural, scarcely ever appearing in any others, except when communicated from these. When a dog is affected with madness, he becomes dull, solitary, and endeavours to hide himself, seldom barking, but making a murmuring noise, and refusing all kinds of meat and drink. He flies at strangers; but, in this stage, he remembers and respects his master; his head and tail hang down; he walks as if overpowered by sleep; and a bite, at this period, though dangerous, is not so apt to bring on the disease in the animal bitten as one inflicted at a later period. The dog at length begins to pant; he breathes quickly and heavily; his tongue hangs out; his mouth is continually open, and discharges a large quantity of froth. Sometimes he walks slowly, as if half asleep, and then runs suddenly, but not always directly forward. At last he forgets his master; his eyes have a dull, watery, red appearance; he grows thin and weak, often falls down, gets up and attempts to fly at every thing, becoming very soon quite furious. The animal seldom lives in this latter state longer than thirty hours; and it is said, that his bites, towards the end of his existence, are the most dangerous. The throat of a person suffering hydrophobia is always much affected; and, it is asserted, the nearer the bite to this part the more perilous.

Hydrophobia may be communicated to the human subject from the bites of cats, cows, and other animals, not of the canine species, to which the affection has been previously communicated. However, it is from the bites of those domestic ones, the dog and cat, that most cases of hydrophobia originate. It does not appear that the bite of a person affected can communicate the disease to another; at least the records of medicine furnish no proof of this circumstance.

In the human species, the general symptoms attendant upon the bite of a mad dog, or other rabid animal, are, at some indefinite period, and occasionally long after the bitten part seems quite well, a slight pain begins to be felt in it, now and then attended with itching, but generally resembling a rheumatic pain. Then come on wandering pains, with an uneasiness and heaviness, disturbed sleep, and frightful dreams, accompanied with great restlessness, sudden startings, and spasms, sighing, anxiety, and a love for solitude. These symptoms continuing to increase daily, pains begin to shoot from the place which was wounded, all along up to the throat, with a straitness and sensation of choking, and a horror and dread at the sight of water, and other liquids, together with a loss of appetite and tremor. The person is, however, capable of swallowing any solid substance with tolerable ease; but the moment that any thing in a fluid form is brought in contact with his lips, it occasions him to start back with much dread and horror, although he labours perhaps under great thirst at the time.

A vomiting of bilious matter soon comes on, in the course of the disease, and an intense hot fever ensues, attended with continual watching, great thirst, dryness and roughness of the tongue, hoarseness of the voice, and the discharge of a viscid saliva from the mouth, which the patient is constantly spitting out; together with spasms of the genital and urinary organs, in consequence of which the evacuations are forcibly thrown out. His respiration is laborious and uneasy, but his judgment is unaffected; and, as long as he retains the power of speech, his answers are distinct.

In some few instances, a severe delirium arises, and closes the tragic scene; but it more frequently happens, that the pulse becomes tremulous and irregular, that convulsions arise, and that nature being at length exhausted, sinks under the pressure of misery.

The appearances to be observed, on dissection in hydrophobia, are unusual aridity of the viscera and other parts; marks of inflammation in the fauces, gula, and larynx; inflammatory appearances in the stomach, and an accumulation or effusion of blood in the lungs. Some marks of inflammation are likewise to be observed in the brain, consisting in a serous effusion on its surface, or in a redness of the pia mater; which appearances have also presented themselves in the dog.

In some cases of dissection, not the least morbid appearance has been observed, either in the fauces, diaphragm, stomach, or intestines. The poison has, therefore, been conceived by some physicians to act upon the nervous system, and to be so wholly confined to it, as to make it a matter of doubt whether the qualities of the blood are altered or not. There is no known cure for this terrible disease: and the only preventive to be relied upon is the complete excision of the bitten part, which should be performed as soon as possible; though it may perhaps not be too late any time before the symptoms appear.

HYDROPHTHA'LMIA. (From ὕδωρ, water, and *οφθαλμος*, the eye.) *Hydrophthalmium.* There are two diseases, different in their nature and consequences, thus termed. The one is a mere anasarcous or œdematous swelling of the eyelid. The other, the true hydrophthalmia, is a swelling of the bulb of the eye, from too great a collection of the vitreous or aqueous humours.

Hydrophtha'lmium. (From ὕδωρ, water, and *οφθαλμος*, the eye.) See *Hydrophthalmia.*

Hydrophysoce'le. (From ὕδωρ, water, *φυση*, flatulence, and *κηλη*, a tumour.) Hernia, combined with hydrocele.

Hydro'pica. (From *υδρωψ*, the dropsy.) Medicines which relieve or cure dropsy.

Hydro'piper. (From ὕδωρ, water, and *πεπερι*, pepper; so called from its biting the tongue like pepper, and being a native of marshy places.) See *Polygonum hydropiper.*

Hydropneumosa'rca. (From ὕδωρ, water, *πνευμα*, wind, and *σαρξ*, flesh.) A tumour of air, water, and solid substances.

Hydropoi'des. (From ὕδρωψ, a dropsy, and *ειδος*, likeness.) A term formerly applied to liquid and watery excrements.

HY'DROPS. (*-pis*, m. from ὕδωρ, water.) Dropsy. A preternatural collection of serous or watery fluid in the cellular substance, or different cavities of the body. It receives different appellations, according to the particular situation in which it is lodged.

When it is diffused through the cellular membrane, either generally or partially, it is called *anasarca.* When it is deposited in the cavity of the cranium, it is called *hydrocephalus;* when in the chest, *hydrothorax,* or *hydrops pectoris.* When in the abdomen, *ascites.* In the uterus, *hydrometra,* and within the scrotum, *hydrocele.*

The causes of these diseases are a family disposition thereto, frequent salivations, excessive and long-continued evacuations, a free use of spirituous liquors, (which never fail to destroy the digestive powers,) schirrosities of the liver, spleen, pancreas, mesentery, and other abdominal viscera; preceding diseases, as the jaundice, diarrhœa, dysentery, phthisis, asthma, gout, intermittents of long duration, scarlet fever, and some of the exanthemata; a suppression of accustomed evacuations, the sudden striking in of eruptive humours, ossification of the valves of the heart, polypi in the right ventricle, aneurism in the arteries, tumours making a considerable pressure on the neighbouring parts, permanent obstruction in the lungs, rupture of the thoracic duct, exposure for a length of time to a moist atmosphere, laxity of the exhalants, defect in the absorbents, topical weakness, and general debility.

HY′DROPS AD MA′TULAM. Diabetes.

HY′DROPS ARTI′CULI. A white swelling of a joint is sometimes so called.

HY′DROPS CY′STICUS. Any dropsy enclosed in bags, or cysts.

HY′DROPS GE′NU. An accumulation of synovia, under the capsular ligament of the knee.

HY′DROPS MEDU′LLÆ SPINA′LIS. See *Hydrorachitis* and *Spina bifida.*

HY′DROPS OVA′RII. A dropsy of the ovarium. A species of ascites.

HY′DROPS PE′CTORIS. See *Hydrothorax.*

HY′DROPS PERICA′RDII. See *Hydrocardia.*

HY′DROPS PULMO′NUM. Water in the cellular interstices of the lungs.

HY′DROPS SCRO′TI. See *Hydrocele.*

HY′DROPS U′TERI. See *Hydrometra.*

HYDROPY′RETUS. (From ὑδωρ, water, and πυρετος, fever.) The sweating fever or sickness. See *Sudor Anglicus.*

HYDRORACHI′TIS. (From ὑδωρ, water, and ραχις, the spine.) A fluctuating tumour, mostly situated on the lumbar vertebræ of new-born children. It is a genus of disease in the class *cachexiæ,* and order *intumescentiæ,* of Cullen, and is always incurable. See *Spina bifida.*

HYDRORO′SATUM. A drink made of water, honey, and the juice of roses.

HYDROSA′CCHARUM. (From ὑδωρ, water, and σακχαρον, sugar.) A drink made of sugar and water.

HYDROSA′RCA. (From ὑδωρ, water, and σαρξ, the flesh.) Water in the cellular membrane. See *Anasarca.*

HYDROSARCOCE′LE. (From ὑδωρ, water, σαρξ, the flesh, and κηλη, a tumour.) Sarcocele, with an effusion of water into the cellular membrane.

HYDROSELI′NUM. (From ὑδωρ, water, and σελινον, purslane.) A species of purslane growing in marshy places.

HYDROSULPHURE′TUM STI′BII LU′TEUM. See *Antimonii sulphuretum præcipitatum.*

HYDROSULPHURE′TUM STI′BII RU′BRUM. *Kermes mineralis.* A hydro-sulphuret of antimony formerly in high estimation as an expectorant, sudorific, and antispasmodic, in difficult respiration, rheumatism, diseases of the skin and glands.

HYDROTHO′RAX. (From ὑδωρ, water, and θωραξ, the chest.) *Hydrops thoracis. Hydrops pectoris.* Dropsy of the chest. A genus of disease in the class *cachexiæ,* and order *intumescentiæ,* of Cullen. Difficulty of breathing, particularly when in an horizontal posture; sudden startings from sleep, with anxiety, and palpitations of the heart; cough, paleness of the visage, anasarcous swellings of the lower extremities, thirst, and a scarcity of urine, are the characteristic symptoms of hydrothorax; but the one which is more decisive than all the rest, is a fluctuation of water being perceived in the chest, either by the patient himself or his medical attendant, on certain motions of the body.

The causes which give rise to the disease, are pretty much the same with those which are productive of the other species of dropsy. In some cases, it exists without any other kind of dropsical affection being present; but it prevails very often as a part of more universal dropsy.

It frequently takes place to a considerable degree before it becomes very perceptible; and its presence is not readily known, the symptoms, like those of hydrocephalus, not being always very distinct. In some instances, the water is collected in both sacs of the pleura; but at other times, it is only in one. Sometimes it is lodged in the pericardium alone; but, for the most part, it only appears there when, at the same time, a collection is present in one or both cavities of the thorax. Sometimes the water is effused in the cellular texture of the lungs, without any being deposited in the cavity of the thorax. In a few cases, the water that is collected is enveloped in small cysts, of a membranous nature, known by the name of hydatides, which seem to float in the cavity; but more frequently they are connected with, and attached to, particular parts of the internal surface of the pleura.

Hydrothorax often comes on with a sense of uneasiness at the lower end of the sternum, accompanied by a difficulty of breathing, which is much increased by any exertion, and which is always most considerable during night, when the body is in an horizontal posture. Along with these symptoms there is a cough, that is at first dry, but which, after a time, is attended with an expectoration of thin mucus. There is likewise a paleness of the complexion, and an anasarcous swelling of the feet and legs, together with a considerable degree of thirst, and a diminished flow of urine. Under these appearances, we have just grounds to suspect that there is a collection of water in the chest; but if the fluctuation can be perceived, there can then remain no doubt as to the reality of its presence.

During the progress of the disease, it is no uncommon thing for the patient to feel a numbness, or degree of palsy, in one or both arms, and to be more than ordinarily sensible to cold. With regard to the pulse, it is usually quick at first, but, towards the end, becomes irregular and intermitting.

Our prognostic in hydrothorax must, in general, be unfavourable, as it has seldom been cured, and, in many cases, will hardly admit even of alleviation, the difficulty of breathing continuing to increase, until the action of the lungs is at last entirely impeded by the quantity of water deposited in the chest. In some cases, the event is suddenly fatal, but in others, it is preceded, for a few days previous to death, by a spitting of blood.

Dissections of this disease shew that, in some cases, the water is either collected in one side of the thorax, or that there are hydatides formed in some particular part of it; but they more frequently discover water in both sides of the chest, accompanied by a collection in the cellular texture and principal cavities of the body. The fluid is usually of a yellowish colour; possesses properties similar to serum, and, with respect to its quantity, varies very much, being from a few ounces to several quarts. According to the quantity, so are the lungs compressed by it; and, where it is very considerable, they are usually found much reduced in size. When universal anasarca has preceded the collection in the chest, it is no uncommon occurrence to find some of the abdominal viscera in a schirrous state.

The treatment of this disease must be conducted on the same general plan as that of anasarca. Emetics, however, are hazardous, and purgatives do not afford so much benefit; but the bowels must be kept regular, and other evacuating remedies may be employed in conjunction with tonics. Squill has been chiefly resorted to, as being expectorant as well as diuretic; but its power is usually not great, unless it be carried so far as to cause nausea, which cannot usually be borne to any extent. Digitalis is more to be relied upon; but it will be better to conjoin them, adding, perhaps, some form of mercury; and employing at the same time other diuretics, as the supertartrate or acetate of potash, juniper berries, &c. Where febrile symptoms attend, diaphoretics will probably be especially serviceable, as the pulvis ipecacuanhæ compositus, or antimonials in small doses; which last may also promote expectoration. Blisters to the chest will be proper in many cases, particularly should there be any pain or other mark of inflammatory action. Myrrh seems to answer better than most other tonics, as more decidedly promoting expectoration; or the nitric acid may be given, increasing the secretion of urine, as well as supporting the strength. The inhalation of oxygen gas is stated to have been in some instances singularly beneficial. Where the fluid is collected in either of the sacs of the pleura, the operation of paracentesis of the thorax may afford relief under urgent symptoms, and, perhaps, contribute to the recovery of the patient.

HYGIE′NE. (From ὑγιαινω, to be well.) *Hygiesis. Hygeia.* Modern physicians have applied this term to that division of *therapeia* which treats of the diet of the sick and the non-naturals.

Hygie′sis. See *Hygiene.*

Hy′gra. (From ὑγρος, humid.) Liquid plasters.

Hygrempla′strum. (From υγρος, moist, and εμπλαϛρον, a plaster.) A liquid plaster.

Hygroblepha′ricus. (From υγρος, humid, and βλεφαρον, the eye-lid.) Applied to the emunctory ducts in the extreme edge, or inner part, of the eye-lid.

Hygrocirsoce′le. (From υγρος, moist, κιρσος, a varix, and κηλη, a tumour.) Dilated spermatic veins, with dropsy of the scrotum.

Hygrocolly′rium. (From υγρος, liquid, and κολλυριον, a collyrium.) A collyrium composed of liquids.

HYGRO′LOGY. (*Hygrologia*; from υγρος, a humour or fluid, and λογος, a discourse.) The doctrine of the fluids.

HYGRO′MA. (υγρωμα: from ὑγρος, a liquid.) An encysted tumour, whose contents are either serum or a fluid like lymph. It sometimes happens that these tumours are filled with hydatids. Hygromatous tumours require the removal of the cyst, or the destruction of its secreting surface.

HYGRO′METER. (*Hygrometrum*; from υγρος, moist, and μετρον, a measure.) Hydrometer. An instrument to measure the degrees of moisture in the atmosphere. It also means an infirm part of the body, affected by moisture of the atmosphere.

HYGROSCO′PICS. Substances which have the property of absorbing moisture from the atmosphere. See *Atmosphere.*

Hygromy′rum. (From υγρος, moist, and μυρον, a liquid ointment.) A liquid ointment.

Hygropho′bia. The same as hydrophobia.

Hy′le. (υλη, matter.) The materia medica, or matter of any kind which comes under the cognisance of a medical person.

HY′MEN. (From *Hymen*, the god of marriage, because this membrane is supposed to be entire before marriage, or copulation.) The hymen is a thin membrane, of a semilunar or circular form, placed at the entrance of the vagina, which it partly closes. It has a very different appearance in different women, but it is generally, if not always found, in virgins, and is very properly esteemed the test of virginity, being ruptured in the first act of coition.

The remnants of the hymen are called the carunculæ myrtiformes. The hymen is also peculiar to the human species. There are two circumstances relating to the hymen which require medical assistance. It is sometimes of such a strong ligamentous texture, that it cannot be ruptured, and prevents the connection between the sexes. It is also sometimes imperforated, wholly closing the entrance into the vagina, and preventing any discharge from the uterus; but both these cases are extremely rare. If the hymen be of an unnaturally firm texture, but perforated, though perhaps with a very small opening, the inconveniencies thence arising will not be discovered before the time of marriage, when they may be removed by a crucial incision made through it, taking care not to injure the adjoining parts.

The imperforation of the hymen will produce its inconveniences when the person begins to menstruate. For the menstruous fluid, being secreted from the uterus at each period, and not evacuated, the patient suffers much pain from the distension of the parts, many strange symptoms and appearances are occasioned, and suspicions injurious to her reputation are often entertained. In a case of this kind, for which Dr. Denman was consulted, the young woman, who was twenty-two years of age, having many uterine complaints, with the abdomen enlarged, was suspected to be pregnant, though she persevered in asserting the contrary, and had never menstruated. When she was prevailed upon to submit to an examination, the circumscribed tumour of the uterus was found to reach as high as the navel, and the external parts were stretched by a round soft substance at the entrance of the vagina, in such a manner as to resemble that appearance which they have when the head of a child is passing through them: but there was no entrance into the vagina. On the following morning, an incision was carefully made through the hymen, which had a fleshy appearance, and was thickened in proportion to its distension. Not less than four pounds of blood, of the colour and consistence of tar, were discharged; and the tumefaction of the abdomen was immediately removed. Several stellated incisions were afterwards made through the divided edges, which is a very necessary part of the operation; and care was taken to prevent a re-union of the hymen till the next period of menstruation, after which she suffered no inconvenience. The blood discharged was not putrid or coagulated, and seemed to have undergone no other change, after its secretion, but what was occasioned by the absorption of its more fluid parts. Some caution is required when the hymen is closed in those who are in advanced age, unless the membrane be distended by the confined menses; as Dr. Denman once saw an instance of inflammation of the peritonæum being immediately produced after the operation, of which the patient died as in the true puerpeal fever, and no other reason could be assigned for the disease.

The carunculæ myrtiformes, by their elongation and enlargement, sometimes become very painful and troublesome.

HYMENÆ'A COU'RBARIL. (*Hymenæa*, corrupted from *anime*, or *animæa*.) The systematic name of the tree which affords the resin anime. See *Anime*.

HYO. Names compounded of this word belong to muscles which originate from, or are inserted into, or connected with the os hyoides; as, *Hyo-glossus*, *Hyo-pharyngeus*, *Genio-hyo-glossus*, &c.

HYO-GLO'SSUS. *Cerato-glossus* of Douglas and Cowper. *Basio-cerato-chondro-glossus* of Albinus. *Hyo-chondro-glosse* of Dumas. A muscle situated at the sides between the os hyoides and the tongue. It arises from the basis, but chiefly from the corner of the os hyoides, running laterally and forwards to the tongue, which it pulls inwards and downwards.

HYOI'DES OS. (ὑοειδες: from the Greek letter υ, and ειδος, likeness; so named from its resemblance.) This bone, which is situated between the root of the tongue and the larynx, derives its name from its supposed resemblance to the Greek letter *υ*, and is, by some writers, described along with the parts contained in the mouth. Ruysch has seen the ligaments of the bone so completely ossified, that the os hyoides was joined to the temporal bones by anchylosis. In describing this bone, it may be distinguished into its body, horns, and appendices. The body is the middle and broadest part of the bone, so placed that it may be easily felt with the finger in the fore-part of the throat. Its fore-part, which is placed towards the tongue, is irregularly convex, and its inner surface, which is turned towards the larynx, is unequally concave. The *cornua*, or horns, which are flat, and a little bent, are considerably longer than the body of the bone, and may be said to form the sides of the *υ*. These horns are thickest near the body of the bone. At the extremity of each is observed a round tubercle, from which a ligament passes to the thyroid cartilage. The appendices, or lesser horns, *cornua minora*, as they are called by some writers, are two small processes, which in their size and shape are somewhat like a grain of wheat. They rise up from the articulations of the cornua, with the body of the bone, and are sometimes connected with the styloid process on each side, by means of a ligament. It is not unusual to find small portions of bone in these ligaments; and Ruysch, as we have already observed, has seen them completely ossified. In the fœtus, almost the whole of the bone is in a cartilaginous state, excepting a small point of a bone in the middle of its body, and in each of its horns. The appendices do not begin to appear till after birth, and usually remain cartilaginous many years. The os hyoides serves to support the tongue, and affords attachment to a variety of muscles, some of which perform the motions of the tongue, while others act on the larynx and fauces.

HYOPHARYNGE′US. (From *υοειδες*, the hyoid bone, and *φαρυγξ*, the pharynx.) A muscle so called from its origin in the os hyoides, and its insertion in the pharynx.

Hyophtha′lmus. (From *υς*, a swine, and *οφθαλμος*, an eye; so named from the supposed resemblance of its flower to a hog's eye.) Golden starwort; hog's eye plant.

HYOSCY′AMUS. (From *υς*, a swine, and *κυαμος*, a bean; so named because hogs eat it as a medicine, or it may be because the plant is hairy and bristly, like a swine.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*.

2. The pharmacopœial name of the henbane. See *Hyosciamus niger*.

Hyoscy′amus al′bus. This plant, a native of the south of Europe, possesses similar virtues to the hyoscyamus niger. See *Hyoscyamus*.

Hyoscy′amus lu′teus. A species of tobacco.

Hyoscy′amus ni′ger. The systematic name of henbane, called also *Faba suilla. Apollinaris altercum. Agone. Altercangenon.* Common or black henbane. *Hyoscyamus niger, foliis amplexicaulibus sinuatis, floribus sessilibus* of Linnæus.

The leaves of this plant, when recent, have a slightly fœtid smell, and a mucilaginous taste; when dried, they lose both taste and smell, and part also of their narcotic power. The root possesses the same qualities as the leaves, and even in a more eminent degree.

Henbane resembles opium in its action, more than any other narcotic does. In a moderate dose, it increases at first the strength of the pulse, and occasions some sense of heat, which are followed by diminished sensibility and motion; in some cases, by thirst, sickness, stupor, and dimness of vision. In a larger quantity it occasions profound sleep, hard pulse, and sometimes fierce delirium, ending in coma, or convulsions, with a remarkable dilatation of the pupil, distortion of the countenance, a weak tremulous pulse, and eruption of petechiæ. On dissection, gangrenous spots have been found on the internal surface of the stomach. Its baneful effects are best counteracted by a powerful emetic, and by drinking largely of the vegetable acids.

Henbane has been used in various spasmodic and painful diseases, as in epilepsy, hysteria, palpitation, head-ache, paralysis, mania, and scirrhus. It is given in the form of the inspissated juice of the fresh leaves, the dose of which is from one to two grains; which requires to be gradually increased. It is sometimes employed as a substitute for opium, where the latter, from idiosyncrasy, occasions any disagreeable symptom. The henbane also is free from the constipating quality of the opium.

Hyothyroi′des. (From *υοειδες*, the hyoid bone, and *θυροειδης*, the thyroid cartilage.) A muscle named from its origin in the hyoid bone, and insertion in the thyroid cartilage.

Hypa′ctica. (From *υπαγω*, to subdue.) Medicines which evacuate the fæces.

Hypalei′ptrum. (From *υπαλειφω*, to spread upon.) A spatula for spreading ointments with.

Hype′lata. (From *υπελαω*, to move.) Cathartics.

Hyperæsthe′sis. (From *υπερ*, and *αισθανομαι*, to feel.) Error of appetite, whether by excess or deficiency. It is synonymous with Dr. Cullen's order of *dysorexiæ*.

HYPERCATHA′RSIS. (From *υπερ*, *supra*, over or above, and *καθαιρω*, to purge.) *Hyperinesis. Hyperinos.* An excessive purging from medicines.

Hypercorypho′sis. (From *υπερ*, above, and *κορυφη*, the vertex.) A prominence, or protuberance. Hippocrates calls the lobes of the liver and lungs *Hypercoryphoses*.

Hype′rcrisis. (*υπερκρισις*: from *υπερ*, over or above, and *κρινω*, to separate.) A critical excretion above measure; as when a fever terminates in a looseness, the humours may flow off faster than the strength can bear, and therefore it is to be checked.

Hypere′mesis. (From *υπερ*, in excess, and *εμεω*, to vomit.) An excessive evacuation by vomiting.

Hyperephidro′sis. (From *υπερ*, excess, and *ιδρως*, sweat.) Immoderate sweating.

HYPE′RICUM. (From *ὑπερ*, over, and *εικων*, an image, or spectre; so named because it was thought to have power over and to drive away evil spirits.) 1. The name of a genus of plants in the Linnæan system. Class, *Polyadelphia*. Order, *Polyandria*. St. John's wort.

2. The pharmacopœial name of the perforated or common St. John's wort, called also *fuga dæmonum*, and *androsæmum. Hypericum perforatum—floribus trigynis, caule ancipiti, foliis obtusis pellucido-punctatis.* of Linnæus. This indigenous plant was greatly esteemed by the antients, internally in a great variety of diseases, and externally as an anodyne and discutient, but is now very rarely used. The flowers were formerly used in our pharmacopœia, on account of the great proportion of resinous

oily matter, in which the medical efficacy of that plant is supposed to reside, but are now omitted.

Hype′ricum perfora′tum. The systematic name of the St. John's wort. See *Hypericum*.

Hype′ricum saxa′tile. *Hypericoides. Coris lutea. Coris legitima cretica.* Bastard St. John's wort. The seeds are said to be diuretic, emmenagogue, and powerfully antispasmodic.

Hyperi′na. (From υπερ, in excess, and ινεω, to evacuate.) Medicines which purge excessively.

Hyperine′sis. See *Hypercatharsis.*

Hyperi′nos. See *Hypercatharsis.*

Hypero′a. (From υπερ, above, and ωον, the top of a house.) The palate.

Hyperopharynge′us. (From υπερ, above, and φαρυγξ, the pharynx.) A muscle named from its situation above the pharynx.

Hyperosto′sis. (From υπερ, upon, and οςεον, a bone.) See *Exostosis.*

Hypero′um. (From υπερ, above, and ωον, the roof, or palate.) A foramen in the upper part of the palate.

Hyperoxymuriate of potash. See *Murias hyperoxygenatus potassæ.*

Hyperoxymuriatic acid. This is oxymuriatic acid combined with an additional quantity of oxygen. It exists in the salts called hyper-oxymuriates.

Hypersarco′ma. (From υπερ, in excess, and σαρξ, flesh.) *Hypersarcosis.* A polypus in the nose. A fleshy excrescence. A polypus.

Hypersarco′sis. See *Hypersarcoma.*

Hyperydro′sis. (From υπερ, in excess, and υδωρ, water.) A great distension of any part, from water collected in it.

Hype′xodos. (υπεξοδος: from υπο, under, and εξοδος, passing out.) A flux of the belly.

Hypno′bates. (From υπνος, sleep, and βαινω, to go) *Hypnobatasis.* One who walks in his sleep. See *Oneirodynia.*

Hypnolo′gia. (From υπνος, sleep, and λογος, a discourse.) A dissertation, or directions for the due regulation of sleeping and waking.

Hypnopoie′tica. (From υπνος, sleep, and ποιεω, to cause.) Medicines which procure sleep. See *Anodynes.*

Hypno′tics. (*Hypnotica,* sc. *medicamenta,* υπνωτικα; from ὑπνος, sleep.) See *Anodynes.*

HYPOÆ′MA. (From ὑπο, under, and αιμα, blood; because the blood is under the cornea.) An effusion of red blood into the chambers of the eye.

Hypocaro′des. (From υπο, and καρος, a carus.) *Hypocarothis.* One who labours under a low degree of carus.

Hypocatha′rsis. (From υπω, under, and καθαιρω, to purge.) It is when a medicine does not work so much as expected, or but very little. Or a slight purging, when it is a disorder.

Hypocau′strum. (From υπο, under, and καιω, to burn.) A stove, or hot-house, or any such-like contrivance; or place to sweat in, or to preserve plants from cold air.

Hypocerchna′leon. (From υπο and κερχνος, an asperity of the fauces.) A stridulous kind of asperity of the fauces.

Hypocheo′menos. (From υπο, under, and χεω, to pour.) One who labours under a cataract.

Hypochloro′sis. (From υπο, and χλωρωσις, the green sickness.) A slight degree of chlorosis.

HYPOCHO′NDRIAC RE′GIONS. (*Regiones hypochondriacæ;* from ὑπο, under, and χονδρος, a cartilage.) *Hypochondria.* The spaces in the abdomen that are under the cartilages of the spurious ribs on each side of the epigastrium.

HYPOCHONDRI′ASIS. (From υποχονδριακος, one who is hipped) *Hypochondriacus morbus. Affectio hypochondriaca. Passio hypochondriaca.* The hypochondriac affection. Vapours, spleen, &c. A genus of disease in the class *neuroses,* and order *adynamiæ,* of Cullen, characterized by dyspepsia; languor, and want of energy; sadness and fear, from uncertain causes; with a melancholic temperament.

The state of mind peculiar to hypochondriacs is thus described by Cullen:—"A languor, listlessness, or want of resolution and activity, with respect to all undertakings; a disposition to seriousness, sadness and timidity, as to all future events, and apprehension of the worst or most unhappy state of them; and, therefore, often upon slight grounds, an apprehension of great evil. Such persons are particularly attentive to the state of their own health, to every the smallest change of feeling in their bodies; and from any unusual sensation, perhaps of the slightest kind, they apprehend great danger, and even death itself. In respect to these feelings and fears, there is commonly the most obstinate belief and persuasion." He adds, that it is only when the state of mind just described is joined with indigestion, in either sex, somewhat advanced in years, of a melancholic temperament, and a firm and rigid habit, that the disease takes the name of *Hypochondriacism.*

The seat of the hypochondriac passion is in the stomach and bowels; for first these parts are disordered, then the others suffer from the connexion.

The causes are, sorrow, fear, or excess of any of the passions; too long continued watching; irregular diet. Those habitually disposed to it, (and these causes have little effect in other constitutions,) have generally a sallow or brown complexion, and a down-cast look; a rigidity of the solids, and torpor of the nervous system. Whatever may occasion nervous disorders in general, may be the cause of this in particular.

The signs of this complaint are so various, that to describe them is to describe almost every other disease; but, in general, there is an insurmountable indolence, dejected spirits, dread of death, costiveness, a slow and somewhat difficult inspiration, flatulencies in the primæ viæ, and various spasmodic affections. It is seldom fatal; but if neglected, or improperly treated, may bring on incurable melancholy, jaundice, madness, or vertigo, palsy, and apoplexy.

On dissections of hypochondriacal persons, some of the abdominal viscera, (particularly the liver and spleen) are usually found considerably enlarged. In some few instances, effusion and a turgescence of the vessels have been observed in the brain.

This being a disease of a mixed description, the treatment must be partly corporeal, partly mental; but it has been too often neglected, as merely imaginary, and their complaints met by argument or raillery, which, however, can only weaken their confidence in the practitioner. It may be very proper to inform them, that their disorder is not so dangerous as they suppose, and may be removed by suitable remedies; but to tell them they ail nothing, is absurd. In reality, medicine is often of much service; and though others have been cured chiefly by amusements, country air, and exercise, it by no means follows, that their disorder was only in the imagination. In so far as dyspeptic symptoms appear, these must be encountered by the remedies pointed out under that head; antacids, aperients, &c. Sometimes emetics, or drastic cathartics, have produced speedy relief; but they are too debilitating to be often employed. The bowels will be better regulated by milder remedies, as castor oil, senna, aloes, (unless they are subject to hæmorrhoids,) and the like; and magnesia may at the same time correct acidity; but if the liver be torpid, some mercurial preparation will be of more avail. Flatulence and spasmodic pains may be relieved by aromatics, ether, the fœtid gum resins, musk, valerian, &c.; but severe and obstinate pain, or high irritation, will be best attacked by opium, it is important, however, to guard against the patient getting into the habitual use of this remedy. Occasionally mild tonics appear useful, especially chalybeate waters; and tepid bathing, with friction, gentle exercise, and warm clothing, are important to keep up the function of the skin. The diet should be light, and sufficiently nutritious; but moderation must be enjoined to those, who have been accustomed to indulge too much in the luxuries of the table; and, in all cases, those articles which are acescent, flatulent, or difficult of digestion must be avoided. Malt liquors do not usually agree so well as wine or spirits, considerably diluted; but these stimuli should never be allowed unnecessarily. The mental treatment required will be such as is calculated to restore the strength, and correct the aberrations of the judgment. When any false association of ideas occurs, the best mode of removing it is, by keeping up a continued train of naturally associated impressions of superior force, which may amuse the mind, and moderately exercise, without exhausting it. A variety of literary recreations and diversions, especially in the open air, with agreeable company, will be therefore advisable; frequently changing the scene, taking them to watering places, and adopting other expedients, to prevent them from dwelling too much upon their own morbid feelings.

HYPOCHO'NDRIUM. (From υπο, under, and χονδρος, a cartilage.) That part of the body which lies under the cartilages of the spurious ribs.

Hypo'chyma. (From υπο, and χυω, to pour; because the ancients thought that the opacity proceeded from something running under the crystalline humour.) *Hypochysis.* A cataract.

Hypoci'stis. (From υπο, under, and κιϛος, the cistus.) A plant called by Linnæus *Asarum hypocistis*, a parasitical plant, growing in warm climates, from the roots of the cistus. The juice, *succus hypocistidis*, is a mild astringent, of no particular smell nor flavour. It is seldom used.

Hypocle'pticum. (From υπο, under, and κλεπτω, to steal.) A chemical vessel for separating liquors, particularly the essential oil of any vegetable from the water; and named because it steals, as it were, the water from the oil.

Hypocoe'lon. (From υπο, under, and κοιλον, a cavity.) The cavity under the lower eye-lid.

Hypocopho'sis. *Cophosis*, but in a less degree.

Hypocra'nium. (From υπο, under, and κρανιον, the skull.) A kind of abscess, so called because seated under the cranium, between it and the dura mater.

Hypodei'ris. In Rufus Ephesius, it is the extremity of the fore-part of the neck.

Hypode'rmis. (From υπο, under, and δερμα, the skin.) The cuticle under the clitoris, which covers it like a prepuce. The clitoris.

Hypo'desis. (From υπο, under, and δεω, to bind.) An underswathe, or bandage.

Hypode'smus. A bandage like the former.

HYPO'GALA. (From υπο, under, and γαλα, milk; because it is a milk-like effusion, under the cornea.) A collection of white humour, like milk, in the chambers of the eye. There are two species of this disease; the one takes place, it is said, from a deposition of the milk, as is sometimes observed in women who suckle; the other from a depression of the milky cataract.

HYPOGA'STRIC A'RTERIES. See *Iliac arteries*.

HYPOGA'STRIC RE'GION. (*Regio hypogastrica*; from υπο, under, and γαςηρ, the stomach.) The region of the abdomen that reaches from above the pubes to within three fingers' breadth of the navel.

HYPOGA'STRIUM. (From υπο, under, and γαςηρ, the stomach.) The lower region of the fore-part of the belly.

Hypogastroce'le. (From υπογαςριον, the hypogastrium, and κηλη, a tumour.) A tumour, or hernia, in the hypogastric region.

Hypoglo'ssis. (From υπο, under, and γλωσσα, the tongue.) The under part of the tongue, which adheres to the lower jaw.

Hypoglo'ssus. (From υπο, under, and γλωσσα, the tongue.) A nerve which goes to the under part of the tongue.

Hypoglo'ttides. (From υπο, under, and γλωττα, the tongue.) They are a kind of medicine to be held under the tongue until they are dissolved.

Hypoglu'tis. (From υπο, under, and γλουτος, the nates.) It is the fleshy part under the nates towards the thigh. Some say it is the flexure of the coxa, under the nates.

Hypo'mia. (From υπο, under, and ωμος, shoulder.) In Galen's Exegesis, it is the part subjacent to the shoulder.

Hypo'nomos. (From υπονομος, a phagedenic ulcer.) A subterraneous place. A deep phagedenic ulcer.

Hypope'dium. (From υπο, under, and πους, the foot.) A cataplasm for the sole of the foot.

Hypo'phora. (From υποφερομαι, to be carried or conveyed underneath.) A deep fistulous ulcer.

Hypophtha'lmion. (From υπο, under, and οφθαλμος, the eye.) The part under the eye which is subject to swell in a cachexy, or dropsy.

Hypo'physis. (From υπο, under, and φυω, to produce.) A disease of the eyelids, when the hairs grow so much as to irritate and offend the pupil.

HYPO'PYUM. (From υπο, under, and πυον, pus; because the pus is under the cornea.) *Hypopion. Pyosis. Abscessus oculi.* An accumulation of a glutinous yellow fluid, like pus, which takes place in the anterior chamber of the aqueous humour, and frequently also in the posterior one, in consequence of severe, acute ophthalmy, particularly the internal species.

This viscid matter of the hypopyum, is commonly called pus; but Scarpa contends, that it is only coagulating lymph. The symptoms portending an extravasation of coagulable lymph in the eye, or an hypopyum, are the same as those which occur in the highest stage of violent acute ophthalmy, viz. prodigious tumefaction of the eye-lids; the same swelling and redness as in chemosis; burning heat and pain in the eye; pains in the eye-brow, and nape of the neck; fever, restlessness, aversion to the faintest light, and a contracted state of the pupil.

Hypori'nion. (From υπο, under, and ριν, the nose.) A name for the parts of the upper lip below the nostrils.

Hyposa'rca. (From υπο, under, and σαρξ, flesh.) *Hyposarcidios.* An anasarca. In Dr. Cullen's Nosology, it is synonymous with *Physconia*.

Hypospadiæ'os. (From υπο, under, and σπαω, to draw.) The urethra terminating under the glans.

Hypospathi'smus. (From υπο, under and σπαθη, a spatula.) The name of an operation formerly used in surgery, for removing defluxions in the eyes. It was thus named from the instrument with which it was performed.

Hyposphа'gma. (From υπο, under, and σφαζω, to kill.) *Aposphagma.* An extravasation of blood in the tunica adnata of the eye, from external injury.

Hypósple'nia. (From υπο, under, and σπλην, the spleen.) A small tumour of the spleen.

Hyposta'phyle. (From υπο, and ςαφυλη, the uvula.) Relaxation of the uvula.

Hypo'stasis. (From υφιςημι, to subside.) A sediment, as the sediment in urine.

Hypo'thenar. (From υπο, under, and θεναρ, the palm of the hand.) A muscle which runs on the inside of the hand. Also that part of the hand which is opposite to the palm.

HYPO'THESIS. A system of general rules, founded partly on fact and partly on conjecture. A theory explains every fact: an hypothesis explains only a certain number of facts, leaving some unaccounted for and others in opposition to it.

Hypo'theton. (From υπο, under, and τιθημι, to put.) A suppository, or medicine introduced into the rectum, to procure stools.

Hypo'xylon. (From υπο, and ξυλον, wood.) A species of *clavaria*, which grows under old wood.

Hypozo'ma. (From υπο, and ζωννυμι, to bind round.) The diaphragm.

Hypsiglo'ssus. (From υψιλοειδες, the hypsiloid bone, and γλωσσα, the tongue.) A muscle named from its origin in the os hyoides, and its insertion in the tongue.

Hypsiloi'des. A name of the *Os Hyoides*; also of the *Basioglossus muscle*. See *Hyoglossus*.

Hyptia'smos. (From υπτιαζω, to lie with

the face upwards.) A supine decubiture, or a nausea, with inclination to vomit.

Hypu'lus. (From υπο, under, and ουλη, a cicatrix.) An ulcer which lies under a cicatrix.

Hyssop. See *Hyssopus.*

Hyssop, hedge. See *Gratiola.*

Hyssopi'tes. (From υσσωπος, hyssop.) Wine impregnated with hyssop.

HYSSO'PUS. (υσσωπος: from *Azob*, Heb.) 1. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.* Hyssop.

2. The pharmacopœial name of the common hyssop. *Hyssopus officinalis:—spicis secundis, foliis lanceolatis* of Linnæus. This exotic plant is esteemed as an aromatic and stimulant, but is chiefly employed as a pectoral, and has long been thought useful in humoral asthmas, coughs, and catarrhal affections; for this purpose, an infusion of the leaves, sweetened with honey, or sugar, is recommended to be drank as tea.

Hysso'pus capita'ta. Wild thyme.

Hysso'pus officina'lis. The systematic name of the common hyssop. See *Hyssopus.*

Hy'stera. (From υϛερος, behind; so called because it is placed behind the other parts.) The uterus, or womb.

HYSTERA'LGIA. (From υϛερα, the womb, and αλγος, pain.) A pain in the womb.

HYSTE'RIA. (From υϛερα, the womb, from which the disease was supposed to arise.) *Passio hysterica.* Hysterics. Dr. Cullen places this disease in the class *neuroses,* and order *spasmi.* There are four species.

1. *Hysteria chlorotica,* from a retention of the menses.

2. *Hysteria à leucorrhœa,* from a fluor albus.

3. *Hysteria à menorrhagia,* from an immoderate flow of the menses.

4. *Hysteria libidinosa,* from sensual desires.

The complaint appears under such various shapes, imitates so many other diseases, and is attended with such a variety of symptoms, which denote the animal and vital functions to be considerably disordered, that it is difficult to give a just character or definition of it; and it is only by taking an assemblage of all its appearances, that we can convey a proper idea of it to others.

The disease attacks in paroxysms, or fits. These are sometimes preceded by dejection of spirits, anxiety of mind, effusion of tears, difficulty of breathing, sickness at the stomach, and palpitations at the heart; but it more usually happens, that a pain is felt on the left side, about the flexure of the colon, with a sense of distension advancing upwards, till it gets into the stomach, and removing from thence into the throat, it occasions, by its pressure, a sensation as if a ball was lodged there, which by authors has been called *globus hystericus.* The disease having arrived at this height, the patient appears to be threatened with suffocation, becomes faint, and is affected with stupor and insensibility; whilst, at the same time, the trunk of the body is turned to and fro, the limbs are variously agitated; wild and irregular actions take place in alternate fits of laughter, crying, and screaming; incoherent expressions are uttered, a temporary delirium prevails, and a frothy saliva is discharged from the mouth. The spasms at length abating, a quantity of wind is evacuated upwards, with frequent sighing and sobbing, and the woman recovers the exercise of sense and motion without any recollection of what has taken place during the fit; feeling, however, a severe pain in her head, and a soreness over her whole body.

In some cases, there is little or no convulsive motion, and the person lies seemingly in a state of profound sleep, without either sense or motion.

Hiccup is a symptom which likewise attends, in some instances, on hysteria; and now and then it happens, that a fit of hysteria consists of this alone. In some cases of this nature, it has been known to continue for two or three days, during which, it frequently seems as if it would suffocate the patient, and proceeds, gradually weakening her, till it either goes off or else occasions death by suffocation: but this last is extremely rare. Besides hiccup, other slight spasmodic affections sometimes wholly form a fit of hysteria, which perhaps continue for a day or two, and then either go off of themselves, or are removed by the aid of medicine.

In some cases, the patient is attacked with violent pains in the back, which extend from the spine to the sternum, and at length become fixed upon the region of the stomach, being evidently of a spasmodic nature, and often prevailing in so high a degree as to cause clammy sweats, a pale cadaverous look, coldness of the extremities, and a pulse hardly perceptible.

Hysteric affections occur more frequently in the single state of life than in the married; and that most usually between the age of puberty and that of thirty-five years; and they make their attack oftener about the period of menstruation than at any other.

They are readily excited in those who are subject to them, by passions of the mind, and by every considerable emotion, especially when brought on by surprise; hence, sudden joy, grief, fear, &c. are very apt to occasion them. They have also been known to arise from imitation and sympathy.

Women of a delicate habit, and whose nervous system is extremely sensible, are those who are most subject to hysteric affections; and the habit which predisposes to their attacks, is acquired by inactivity and a sedentary life, grief, anxiety of mind, a suppression or obstruction of the menstrual flux, excessive evacuations, and a constant use of a low diet, or of crude unwholesome food.

Hysteria differs from hypochondriasis in the following particulars, and, by paying attention to them, may always readily be distinguished from it:—Hysteria attacks the sanguine and plethoric; comes on soon after the age of puberty; makes its onset suddenly and violently, so as to deprive the patient of all sense and voluntary motion: is accompanied with the sensation of a ball rising upwards in the throat, so as to threaten suffocation; is attended usually with much spasmodic affection; is more apt to terminate in epilepsy than in any other disease; and, on dissection, its morbid appearances are confined principally to the uterus and ovaria.

The reverse happens in hypochondriasis. It attacks the melancholic; seldom occurs till after the age of thirty-five; comes on gradually: is a tedious disease, and difficult to cure; exerts its pernicious effects on the membranous canal of the intestines, as well by spasms as wind; is more apt to terminate in melancholy, or a low fever, than in any other disease; and, on dissection, exhibits its morbid effects principally on the liver, spleen, and pancreas, which are often found in a hard, scirrhous, or corrupted state.

Another very material difference might be pointed out betwixt these two diseases, which is, that hysteria is much relieved by advancing in age, whereas hypochondriasis usually becomes aggravated.

The two diseases have often been confounded together; but, from considering the foregoing circumstances, it appears that a proper line of distinction should be drawn between them.

The hysteric passion likewise differs from a syncope, as in this there is an entire cessation of the pulse, a contracted face, and a ghastly countenance; whereas, in the uterine disorder, there is often something of a colour, and the face is more expanded; there is likewise a pulse, though languid; and this state may continue two or three days, which never happens in a syncope.

It also differs from apoplexy, in which the abolition of sense and voluntary motion is attended with a sort of snoring, great difficulty of breathing, and a quick pulse; which do not take place in hysteric cases.

It differs from epilepsy, in that this is supposed to arise in consequence of a distension of the vessels of the brain: whereas, in hysteria, the spasmodic and convulsive motions arise from a turgescence of blood in the uterus, or in other parts of the genital system.

However dreadful and alarming an hysteric fit may appear, still it is seldom accompanied with danger, and the disease never terminates fatally, unless it changes into epilepsy, or that the patient is in a very weak reduced state.

The indications in this disease are, 1. To lessen the violence of the fits. 2. To prevent their return by obviating the several causes. Where the attack is slight, it may be as well to leave it in a great measure to have its course. But where the paroxysm is severe, and the disease of no long standing, occurring in a young plethoric female, as is most frequent, and especially from suppression of the menses, a liberal abstraction of blood should be made, and will often afford speedy relief. If this step do not appear advisable, and the disorder be rather connected with the state of the primæ viæ, an emetic may check its progress, if the patient can be got to swallow during a remission of the convulsions. At other times the application of cold water to the skin more or less extensively; strong and disagreeable odours, as hartshorn, burnt feathers, &c.; rubbing the temples with æther; antispasmodics, particularly opium, by the mouth or in glyster; the pediluvium, &c. may be resorted to according to the state of the patient. During the intervals, we must endeavour to remove any observable predisposition; in the plethoric by a spare diet, exercise, and occasional purgatives; in those who are weakly, and rather deficient in blood, by proper nourishment, with chalybeates, or other tonic medicines. The state of the uterine function must be particularly attended to, as well as that of the primæ viæ; those cathartics are to be preferred which are not apt to occasion flatulence, nor particularly irritate the rectum, unless where the menses are interrupted, when the aloetic preparations may claim a preference; and the perspiration should be maintained by warm clothing, particularly to the feet, with the prudent use of the cold bath. The mind ought also to be occupied by agreeable and useful pursuits, and regular hours will tend materially to the restoration of the general health.

Hyste'ria chloro'tica. Hysterics from obstructed menses. See *Hysteria.*

Hyste'ria febrico'sa. A tertian fever, with spasms and convulsions.

Hyste'ria a leucorrhæ'a. Hysterics from fluor albus. See *Hysteria.*

Hyste'ria libidino'sa. Nymphomania, or female libidinous propensity. See *Hysteria.*

Hyste'ria a menorrha'gia. Hysterics from profuse menses. See *Hysteria.*

HYSTERIA'LGES. (From υςερα, the womb, and αλγος, pain.) An epithet for any thing that excites pain in the uterus. Hippocrates applies this word to vinegar; and others signify by it the pains which resemble labour-pains, generally called *false pains.*

HYSTERI'TIS. (From υςερα, the womb.) *Metritis.* Inflammation of the womb. A genus of disease in the class *pyrexiæ,* and order *phlegmasiæ,* of Cullen; characterized by pyrexia, heat, tension, tumour, and pain in the region of the womb; pain in the os uteri when touched, and vomiting.

In natural labours, as well as those of a laborious sort, many causes of injury to the uterus, and the peritonæum which covers it, will be applied. The long continued action of the uterus on the body of the child, and the great pressure made by its head on the soft parts, will further add to the chance of injury. Besides these, an improper application of instruments, or an officiousness of the midwife in hurrying the labour, may have contributed to the violence. To these causes may be added exposure to cold, by taking the woman too early out of bed after delivery, and thereby throwing the circulating fluids upon the internal parts, putting a stop to the secretion of milk, or occasioning a suppression of the lochia.

An inflammation of the womb is sometimes perfectly distinct, but is more frequently communicated to the peritoneum, Fallopian tubes, and ovaria; and having once begun, the natural functions of the organ become much disturbed, which greatly adds to the disease.

It is oftener met with in women of a robust and plethoric habit than in those of lax fibres and a delicate constitution, particularly where they have indulged freely in food of a heating nature, and in the use of spirituous liquors. It never prevails as an epidemic, like puerperal fever, for which it has probably often been mistaken; and to this we may with some reason, ascribe the difference in the mode of treating the disease, which has taken place among physicians.

An inflammation of the uterus shows itself usually about the second or third day after delivery, with a painful sensation at the bottom of the belly, which gradually increases in violence, without any kind of intermission. On examining externally, the uterus appears much increased in size, is hard to the feel, and on making a pressure upon it, the patient experiences great soreness and pain.

Soon afterwards there ensues an increase in heat over the whole of the body, with pains in the head and back, extending into the groins, rigors, considerable thirst, nausea, and vomiting. The tongue is white and dry, the secretion of milk is usually much interrupted, the lochial discharge is greatly diminished, the urine is high-coloured and scanty, and if the inflammation is extended to the bladder, is then so totally obstructed as to render the use of a catheter necessary; the body is costive, and the pulse is hard, full, and frequent.

These are the symptoms which usually present themselves when the inflammation does not run very high, and is perfectly distinct; but when it is so extensive as to affect the peritonæum, those of irritation then generally succeed, and soon destroy the patient.

Uterine inflammation is always attended with much danger, particularly where the symptoms have run high, and the proper means for removing them have not been timely adopted. In such cases, it may terminate either in suppuration, scirrhus, or gangrene.

Frequent rigors, succeeded by flushings of the face, quickness and weakness of the pulse, great depression of strength, delirium, and the sudden cessation of pain and soreness in the region of the abdomen, denote a fatal termination; on the contrary, the ensuing of a gentle diarrhœa, the lochial discharge returning in due quantity and quality, the secretion of milk recommencing, and the uterus becoming gradually softer and less tender to the touch, with an abatement of heat and thirst, prognosticate a favourable issue.

When shiverings attack the patient, after several days continuance of the symptoms, but little relief can be afforded by medicine, the event being generally fatal. In this case, the woman emaciates and loses her strength, becomes hectic, and sinks under colliquative sweating, or purging.

Upon opening the bodies of women who have died of this disease, and where it existed in a simple state, little or no extravasated fluid is usually to be met with in the cavity of the abdomen. In some instances, the peritonæal surfaces have been discovered free from the disease; whilst in others, that portion which covers the uterus and posterior part of the bladder, has been found partially inflamed. The inflammation has been observed, in some cases, to extend to the ovaria and Fallopian tubes, which, when cut open, are often loaded with blood. The uterus itself usually appears of a firm substance, but is larger than in its natural state, and, when cut into, a quantity of pus is often found. Gangrene is seldom, if ever, to be met with.

HYSTEROCE'LE. (From υςερα, the womb, and κηλη, a tumour.) An hernia of the womb. This is occasioned by violent muscular efforts, by blows on the abdomen at the time of gestation, and also by wounds and abscesses of the abdomen which permit the uterus to dilate the part. Ruysch relates the case of a woman, who, becoming pregnant after an ulcer had been healed in the lower part of the abdomen, the tumid uterus descended into a dilated sac of the peritonæum in that weakened part, till it hung, with the included fœtus, at her knees. Yet when her full time was come, the midwife reduced this wonderful hernia, and, in a natural way, she was safely delivered of a son.

Hysterocy′sticus. (From υϛερα, the womb, and κυϛις, the bladder.) Applied to a suppression of urine from the pressure of the uterus against the neck of the bladder.

Hy′steron. (From υϛερος, afterwards; so named because it comes immediately after the fœtus.) The placenta.

Hysterophy′sa. (From υϛερα, the womb, and φυσα, flatus.) The womb distended with air.

HYSTEROPTO′SIS. (From υϛερα, the womb, and πιπτω, to fall.) A bearing down of the womb.

HYSTERO′TOMY. (From υϛερα, the womb, and τεμνω, to cut.) See *Cæsarian operation.*

HYSTRICI′ASIS. (From υϛριξ, a hedge-hog, or porcupine.) A disease of the hairs, in which they stand erect, like porcupine quills. An account of this rare disease is to be seen in the *Philosophical Transactions*, No. 424.

Hy′stricis la′pis. See *Bezoar hystricis.*

HYSTRI′TIS. See *Hysteritis.*

I.

IATRALEI′PTES. (From ιατρος, a physician, and αλειφω, to anoint.) One who undertakes to cure distempers by external unction and friction: Galen makes mention of such in his time, particularly one Diotas; and Pliny informs us, that this practice was first introduced by Prodicus of Selymbria, who was a disciple of Æsculapius.

Iatrochy′micus. (From ιατρος, a physician, and χυμια, chemistry.) *Chymiater.* A chemical physician, who cures by means of chemical medicines.

Iatroli′ptice. (From ιατρος, a physician, and αλειφω, to anoint.) The method of curing diseases by unction and friction.

Iatrophy′sicus. (From ιατρος, a physician, and φυσις, nature.) An epithet bestowed on some writings which treat of physical subjects with relation to medicine.

IBE′RIS. (So named from Iberia, the place of its natural growth.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliculosa.*

2. The pharmacopœial name of the *Sciatica cresses.* See *Lepidium iberis.*

Ibira′ce. See *Guaiacum.*

Ibiræ′um. A wild species of liquorice found in Brasil.

Ibira pita′nga. Logwood.

I′bis. Ιβις was a bird much like our kingsfisher, taken notice of by the Egyptians, because when it was sick, it used to inject with its long bill the water of the Nile into its fundament, whence Langius, lib. ii. ep. ii. says they learned the use of clysters.

Ibi′scus. (From ιβις, the stork, who was said to chew it and inject it as a clyster.) Marshmallow.

Ibi′xuma. (From ιβισκος, the mallow, and ιξος, glue; so named from its having a glutinous leaf, like the mallow.) The soap-tree, or *Saponaria Arbor.*

ICE. *Glacies.* Water made solid by the application of cold. It is frequently applied by surgeons to resolve external inflammatory diseases.

I′CHOR. (Ιχωρ.) A thin, aqueous, and acrid discharge.

I′cthya. (Ιχθυα, a fish-hook; from ιχθυς, a fish.) The skin of the *Squatina,* or monk-fish: also the name of an instrument like a fish-hook, for extracting the fœtus.

ICHTHYOCO′LLA. (From ιχθυς, a fish, and κολλα, glue.) *Colla piscium.* Isinglass. Fish-glue. A substance, partly gelatinous, and partly lymphatic, which is prepared by rolling up the air-bladder of the *Acipenser sturio* of Linnæus, and several other fishes, and drying it in the air, after it has been twisted into the form of a short cord, as we receive it. It affords a viscid jelly by ebullition in water, which is used in medicine as an emollient in disorders of the throat, intestines, &c.

ICHTHYO′SIS. (From ιχθυα, the scale of a fish; from the resemblance of the scales to those of a fish.) A genus of disease of the second order of Dr. Willan's diseases of the skin. The characteristic of ichthyosis is a permanently harsh, dry, scaly, and, in some cases, almost horny texture of the integuments of the body, unconnected with internal disorder. Psoriasis and Lepra differ from this affection, in being but partially diffused, and in having deciduous scales. The arrangement and distribution of the scales in ichthyosis are peculiar. Above and below the olecranon on the arm, says Dr. Willan, and in a similar situation with respect to the patella on the thigh and leg, they are small, rounded, prominent, or papillary, and of a black colour; some of the scaly papillæ have a short, narrow neck, and broad irregular tops. On some part of the extremities, and on the trunk of the body, the scales are flat and large, often placed like tiling, or in the same order as scales on the back of a fish; but, in a few cases, they have appeared separate, being intersected by whitish furrows. There is usually in this complaint a dryness and roughness of the soles of the feet; sometimes a thickened and brittle state of the skin in the palms of the hands, with large painful fissures, and, on the face, an appearance of the scurf rather than of scales. The inner part of the wrists, the hams, the inside of the elbow, the furrow along the spine, the inner and upper part of the thigh, are perhaps the only portions of the skin always exempt from the scaliness. Patients affected with ichthyosis are occasionally much harassed with inflamed pustules, or with large painful boils on different parts of the body: it is also remarkable, that they never seem to have the least perspiration or moisture of the skin. This disease did not, in any case, appear to Dr. Willan to have been transmitted hereditarily; nor was more than one child from the same parents affected with it. Dr. Willan never met with an instance of the horny rigidity of the integuments, *Ichthyosis cornea*, impeding the motion of the muscles or joints. It is, however, mentioned by authors as affecting the lips, prepuce, toes, fingers, &c. and sometimes as extending over nearly the whole body.

ICTERI´TIA. (From *icterus*, the jaundice.) An eruption of yellowish spots. Also a yellow discoloration of the skin, without fevers.

I´CTERUS. (Named from its likeness to the plumage of the golden thrush, of which Pliny relates, that if a jaundiced person looks on one, the bird dies, and the patient recovers.) *Morbus arcuatus*, or *arquatus*. *Aurigo*. *Morbus regius*. *Morbus leseoli*. The jaundice. A genus of disease in the class *cachexiæ*, and order *impetigines*, of Cullen; characterized by yellowness of the skin and eyes; fæces white, and urine of a high colour. There are six species: —

1. *Icterus calculosus*, acute pain in the epigastric region, increasing after eating; gall-stones pass by stool.

2. *Icterus spasmodicus*, without pain after spasmodic diseases and passions of the mind.

3. *Icterus mucosus*, without either pain, gall-stones, or spasm, and relieved by the discharge of tough phlegm by stool.

4. *Icterus hepaticus*, from an induration in the liver.

5. *Icterus gravidarum*, from pregnancy, and disappearing after delivery.

6. *Icterus infantum*, of infants.

It takes place most usually in consequence of an interrupted excretion of bile, from an obstruction in the ductus communis choledochus, which occasions its absorption into the blood-vessels. In some cases it may, however, be owing to a redundant secretion of the bile.

The causes producing the first of these are, the presence of biliary calculi in the gall-bladder and its ducts; spasmodic constriction of the ducts themselves; and, lastly, the pressure made by tumours situated in adjacent parts; hence jaundice is often an attendant symptom on a scirrhosity of the liver, pancreas, &c. and frequently likewise on pregnancy.

Chronic bilious affections are frequently brought on by drinking freely, but more particularly by spirituous liquors; hence they are often to be observed in the debauchee and the drinker of drams. They are likewise frequently met with in those who lead a sedentary life; and who indulge much in anxious thoughts.

A slight degree of jaundice often proceeds from the redundant secretion of the bile, and a bilious habit is therefore constitutional to some people, but more particularly to those who reside long in a warm climate.

By attending to the various circumstances and symptoms which present themselves, we shall in general be able to ascertain, with much certainty, the real nature of the cause which has given rise to the disease.

We may be assured by the long continuance of the complaint, and by feeling the liver and other parts externally, whether or not it arises from any tumour in this viscus, or the pancreas, mesentery, or omentum.

Where passions of the mind induce the disease, without any hardness or enlargement of the liver, or adjacent parts, and without any appearance of calculi in the fæces, or on dissection after death, we are naturally induced to conclude that the disorder was owing to a spasmodic affection of the biliary ducts.

Where gall-stones are lodged in the ducts, acute lancinating pains will be felt in the region of the parts, which will cease for a time, and then return again; great irritation at the stomach and frequent vomiting will attend, and the patient will experience an aggravation of the pain after eating. Such calculi are of various sizes, from a pea to that of a walnut; and, in some cases, are voided in a considerable number, being like the gall of a yellowish, brownish, or green colour.

The jaundice comes on with languor, inactivity, loathing of food, flatulency, acidities in the stomach and bowels, and costiveness. As it advances in its progress, the skin and eyes become tinged of a deep yellow; there is a bitter taste in the mouth, with frequent nausea and vomiting; the urine is very high-coloured; the stools are of a grey or clayey appearance, and a dull obtuse pain is felt in the right hypochondrium, which is much aggravated by pressure with the fingers. Where the pain is very acute, the pulse is apt to become hard and full, and other febrile symptoms to attend.

The disease, when of long continuance, and proceeding from a chronic affection of the liver, or other neighbouring viscera, is often attended with anasarcous swellings, and sometimes with ascites: also scorbutic symptoms frequently supervene.

Where jaundice is recent, and is occasioned by concretions obstructing the biliary ducts, it is probable that, by using proper means, we may be able to effect a cure; but where it is brought on by tumours of the neighbouring parts, or has arisen in consequence of other diseases attended with symptoms of obstructed viscera, our endeavours will most likely not be crowned with success. Arising during a state of pregnancy, it is of little consequence, as it will cease on parturition.

On opening the bodies of those who die of jaundice, the yellow tinge appears to pervade even the most interior part of the body; it is diffused throughout the whole of the cellular membrane, in the cartilages and bones, and even the substance of the brain is coloured with it. A diseased state of the liver, gall-bladder, or adjacent viscera is usually to be met with.

The *Icterus infantum*, or yellow gum, is a species of jaundice which, for the most part, affects all children at or soon after, their birth, and which usually continues for some days.

It has generally been supposed to arise from the meconium, impacted in the intestines, preventing the flow of bile into them.

The effects produced by it, are languor, indolence, a yellow tinge of the skin, and a tendency to sleep, which is sometimes fatal, where the child is prevented from sucking.

The indications in this disease are, 1. To palliate urgent symptoms. 2. To remove the cause of obstruction to the passage of the bile into the duodenum: this is the essential part of the treatment; but the means will vary according to circumstances. When there are appearances of inflammation, of which perhaps the jaundice is symptomatic, or both produced by a gall-stone, the means explained under the head of hepatitis will be proper. If there be severe spasmodic pain, as is usual when a gall-stone is passing, the liberal use of opium and the warm bath will probably relieve it. After which, in all instances, where there is reason for supposing an obstructing cause within the duct, a nauseating emetic, or brisk cathartic, would be the most likely to force it onward: emetics, however, are hardly advisable, except in recent cases without inflammation; and calomel, seeming to promote the discharge of bile more than other cathartics, may be given in a large dose with, or after the opium. Several remedies have been recommended, on the idea that they may dissolve gall-stones; which, however, is hardly probable, unless they should have advanced to the end of the common duct: the fixed alkalies, æther with oil of turpentine, raw eggs, &c. come under this head; though the alkalies may be certainly beneficial by correcting acidity, which usually results from a deficient supply of bile to the intestines; and possibly alter the secretion of the liver so much as to prevent the formation of more concretions. When the complaint arises from scirrhous tumours, mercury is the remedy most likely to afford relief, particularly should the liver itself be diseased: but it must be used with proper caution, and hemlock, or other narcotic, may sometimes enable the system to bear it better. Where this remedy is precluded, nitric acid promises to be the best substitute: the taraxacum appears by no means so much to be depended upon. In all tedious cases the strength must be supported by the vegetable bitters or other tonics, and a nutritious diet, easy of digestion: there is often a dislike of animal food, and a craving for acids, which mostly be may indulged; indeed, when scorbutic symptoms attended, the native vegetable acids have been sometimes very serviceable. The bowels must be kept regular, and the other secretions promoted, to get rid of the bile diffused in the system; as well as to obviate febrile or inflammatory action. When accumulations of hardened fæces induce the complaint, or in the icterus infantum, cathartics may be alone sufficient to afford relief: and, in that of pregnant females, we must chiefly look to the period of delivery.

I'CTERUS A'LBUS. The white jaundice. The chlorosis, or green-sickness, is sometimes thus called.

I'CTUS. A stroke, or blow. Hence *ictus solis*, means a stroke of the sun, or that affection which takes place from too great an influence of the sun's heat. It signifies also the pulsation of an artery, and the sting of a bee, or other insect.

IDÆ'US. (From ιδη, a mountain in Phrygia, their native place.) A name of the peony, and blackberry.

Idiocra'sia. See *Idiosyncrasia.*

IDIOPA'THIC. (*Idiopathicus*; from ιδιος, peculiar, and παθος, an affection.) A disease which does not depend on any other disease, in which respect it is opposed to a symptomatic disease, which is dependant on another.

IDIOSY'NCRASY. (*Idiosyncrasia*; from ιδιος, peculiar, συν, with, and κρασις, a temperament.) A peculiarity of constitution, in which a person is affected by certain agents, which, if applied to a hundred other persons, would produce no effect: thus some people cannot see a finger bleed without fainting; and thus violent inflammation is induced on the skin of some persons by substances that are perfectly innocent to others.

Idiotro'pia. (From ιδιος, peculiar, and τρεπω, to turn.) The same as *Idiosyncrasia.*

Igna'tia ama'ra. The systematic name of the plant which affords St. Ignatius's bean. *Faba indica. Faba sancti ignatii. Faba febrifuga.* These beans are of a roundish figure, very irregular and uneven, about the size of a middling nutmeg, semitransparent, and of a hard, horny texture. They have a very bitter taste, and no considerable smell. They are said to be used in the Philippine islands in all diseases, acting as a vomit and purgative. Infusions are given in the cure of intermittents, &c.

Igna'tii fa'ba. }
Ignatius's bean. } See *Ignatia amara.*

I'gnis ca'lidus. A hot fire: so some call a gangrene: also a violent inflammation, just about to degenerate into a gangrene.

I'gnis fri'gidus. A cold fire. A sphacelus hath been thus called, because the parts that are so affected become as cold as the surrounding air.

I'gnis pe'rsicus. A name of the erysipelas, also of the tumour called a carbuncle.

I'gnis ro'tæ. Fire for fusion. It is when a vessel which contains some matter for fusion is surrounded with live, *i. e.* red hot coals.

I'gnis sa'cer. A name of erysipelas, and of a species of *Herpes.*

I'gnis sapie'ntium. Heat of horse-dung.

I'gnis sylva'ticus. A name of the *Impetigo.*

I'gnis vola'grius. A name of the *Impetigo.*

I'gnis vola'ticus. See *Erysipelas.*

I'kan ra'dix. A somewhat oval, oblong, compressed root, brought from China. It is extremely rare, and would appear to be the root of some of the orchis tribe.

I'laphis. A name in Myrepsus for the burdoch.

I'lech. By this word, Paracelsus seems to mean a first principle.

Ilei'dos. In the Spagyric language it is the elementary air.

I'leon crue'ntum. Hippocrates describes it in lib. De Intern. Affect. In this disease, as well as in the scurvy, the breath is fetid, the gums recede from the teeth, hæmorrhages of the nose happen, and sometimes there are ulcers in the legs, but the patient can move about his business very well.

I'LEUM. (From ειλεω, to turn about; from its convolutions.) *Ileum intestinum.* The last portion of the small intestines, about fifteen hands' breadth in length, which terminates at the valve of the cæcum. See *Intestines.*

I'LEX. (The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Tetragynia.*) The holly. The two following species possess medicinal properties.

I'lex aquifo'lium. The systematic name of the common holly. *Aquifolium.* The leaves of this plant, *Ilex aquifolium; foliis ovatis acutis spinosis,* of Linnæus, have been known to cure intermittent fevers; and an infusion of the leaves, drank as tea, is said to be a preventive against the gout.

I'lex ca'ssine. *Cassina.* This tree grows in Carolina; the leaves resemble those of senna, blackish when dried, with a bitter taste, and aromatic smell. They are considered as stomachic and stimulant. They are sometimes used as expectorants; and when fresh are emetic.

I'lia. (The plural of *Ile,* ειλη.) The flanks, or that part in which are enclosed the small intestines: also the small intestines.

I'LIAC A'RTERIES. *Arteriæ iliacæ.* The arteries so called are formed by the bifurcation of the aorta, near the last lumbar vertebra. They are divided into *internal* and *external.* The *internal iliac,* also called the *hypogastric artery,* is distributed in the fœtus into six, and in the adult into five branches, which are divided about the pelvis, viz. the little iliac, the gluteal, the ischiatic, the pudical, and the obturatory; and in the fœtus the umbilical. The *external iliac* proceeds out of the pelvis through Poupart's ligament, to form the femoral artery.

I'LIAC PA'SSION. (Ειλεος, ιλεος, είλειὸς, is described as a kind of nervous colic, whose seat is the ilium.) *Passio iliaca. Volvulus. Miserere mei. Convolvulus. Chordapsus. Tormentum.* A violent vomiting, in which the fæcal portion of the food is voided by the mouth. See *Colica.*

I'LIAC RE'GION. The side of the abdomen, between the ribs and the hips.

ILI'ACUS INTE'RNUS. *Iliacus* of Winslow. *Iliaco trachanten* of Dumas. A thick, broad, and radiated muscle, which is situated in the pelvis, upon the inner surface of the ilium. It arises fleshy from the inner lip of the ilium, from most of the hollow part, and likewise from the edge of that bone, between its anterior superior spinous process and the acetabulum. It joins with the psoas magnus, where it begins to become tendinous, and passing under the ligamentum Falopii, is inserted in common with that muscle. The tendon of this muscle has been seen distinct from that of the psoas, and, in some subjects, it has been found divided into two portions. The iliacus internus serves to assist the psoas magnus in bending the thigh, and in bringing it directly forwards.

Ili'adum. *Iliadus.* It is the first matter of all things, consisting of mercury, salt, and sulphur. These are Paracelsus's three principles. His *iliadus* is also a mineral spirit, which is contained in every element, and is the supposed cause of diseases.

Ilia'ster. Paracelsus says it is the occult virtue of nature, whence all things have their increase.

Ili'ngos. (Ιλιγγος: from ιλιγξ, a vortex.) A giddiness, in which all things appear to turn round, and the eyes grow dim.

Ili'scus. Avicenna says, it is madness caused by love.

I'LIUM OS. (From *ilia*, the small intestines; so named because it supports the ilia.) The haunch bone. The superior portion of the os innominatum, which, in the fœtus, is a distinct bone. See *Innominatum os.*

Ille'cebra. (From ειλεω, to turn; because its leaves resemble worms.) See *Sedum acre.*

ILLI'CIUM. (*Illicium, ab illiciendo,* denoting an enticing plant, from its being very fragrant and aromatic.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.*

Illi'cium anisa'tum. Yellow-flowered aniseed-tree. The systematic name of the plant, the seeds of which are called the star aniseed. *Anisum stellatum. Anisum sinense. Semen badian.* They are used with the same views as those of the *Pimpinella anisum.* The same tree is supposed to furnish the aromatic bark called *cortex anisi stellati,* or *cortex lavola.*

Illo'sis. (From ιλλος, the eye.) A distortion of the eyes.

Illutame'ntum. An antient form of an external medicine, like the *Ceroma,* with which the limbs of wrestlers, and others delighting in like exercises, were rubbed, especially after bathing; an account of which may be met with in Bactius De Thermis.

Illuta'tio. (From *in,* and *lutum,* mud.) Illutation. A besmearing any part of the body with mud, and renewing it as it grows dry, with a view of heating, drying, and discussing. It was chiefly done with the mud found at the bottom of mineral springs.

I'llys. (From ιλλος, the eye.) A person who squints, or with distorted eyes.

I'lys. (From ιλυς, mud.) The fæces of wine. Also an epithet for sediment in stools, which resemble fæces of wine; also the sediment in urine, when it resembles the same.

Imbeci'llitas oculo'rum. Celsus speaks of the *Nyctalopia* by this name.

Imbibi'tio. (From *imbibo,* to receive into.) In chemistry it is a kind of cohobation, when the liquor ascends and descends upon a solid substance, till it is fixed therewith.

Imme'rsus. A term given by Bartholine, and some other anatomists, to the *Subscapularis* muscle, because it was hidden, or, as it were, sunk.

Impa'tiens. (From *in,* not, and *patior,* to suffer; because its leaves recede from the hand with a crackling noise, as impatient of the touch.) A species of persicaria.

IMPERATO'RIA. (From *impero,* to overcome; so named because its leaves extend and overwhelm the lesser herbs which grow near it.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the *Imperatoria ostruthium* of Linnæus; which see.

Imperato'ria ostru'thium. The systematic name of the master-wort. *Imperatoria. Magistrantia.* The roots of this plant are imported from the Alps and Pyrenees, notwithstanding it is indigenous to this island: they have a fragrant smell, and a bitterish pungent taste. The plant, as its name imports, was formerly thought to be of singular efficacy; and its great success, it is said, caused it to be distinguished by the name of *divinum remedium.* At present, it is considered merely as an aromatic, and consequently is superseded by many of that class which possess superior qualities.

IMPETI'GINES. (The plural of *impetigo;* from *impeto,* to infest.) An order in the class *cachexiæ* of Cullen, the genera of which are characterized by cachexia, deforming the external parts of the body with tumours, eruptions, &c.

IMPETI'GO. This affection, as described by authors, is a disease in which several red, hard, dry, prurient spots arise in the face and neck, and sometimes all over the body, and disappear by furfuraceous or tender scales.

I'mpia he'rba. (From *in,* not, and *pius,* good; because it grows only on barren ground.) A name given to cudweed.

Implicated. Celsus, Scribonius, and some others, call those parts of physic so, which have a necessary dependence on one another; but the term has been more significantly applied, by Bellini, to fevers, where two at a time afflict a person, either of the same kind, as a double tertian; or, of different kinds, as an intermittent tertian, and a quotidian, called a *Semitertian.*

Implu'vium. (From *impluo,* to shower upon.) The shower-bath. An embrocation.

IMPREGNA'TION. See *Conception* and *Generation.*

Inani'tio. (From *inanio,* to empty.) Inanition. Applied to the body, it means evacuation; applied to the mind, it means a defect of its powers.

Incanta'tion. *Incantatio. Incantamentum.* A way of curing diseases by charms, defended by Paracelsus, Helmont, and some other chemical enthusiasts.

Ince'ndium. (From *incendo,* to burn.) A burning fever, or sometimes any burning heat.

Ince'nsio. The same as *Incendium.* Also a hot inflammatory tumour.

Incerni'culum. (From *incerno,* to sift.) A strainer, or sieve. In anatomy, it is a name for the pelvis of the kidney, from its office as a strainer.

Incide'ntia. (From *incido,* to cut.) *Alterantia.* Medicines supposed to cut viscid humours. Medicines were formerly so called which consist of pointed and sharp particles, as acids, and most salts, which are said to incide or cut the phlegm, when they break it so as to occasion its discharge.

Incinera'tio. (From *incinero,* to reduce to ashes.) Incineration. The reducing of any thing to ashes by fire.

Incisi'vus infe'rior. See *Levator labii inferioris.*

Incisi'vus latera'lis. See *Levator labii superioris alæque nasi.*

Incisi'vus me'dius. See *Depressor labii superioris alæque nasi.*

Inciso'rium. (From *incido,* to cut.) A table whereon a patient is laid for an operation.

Inciso'rium fora'men. A name of the foramen, which lies behind the dentes incisores of the upper jaw.

INCI'SORS. (*Dentes incisores;* from *incido,* to cut, from their use in cutting the food.) The four front teeth of both jaws are so called, because they cut the food. See *Teeth.*

Incontine'ntia. (From *in* and *contineo,* to contain.) Inability to retain the natural evacuations.

Incrassa'ntia. (From *incrasso,* to make thick.) Medicines thickening the fluids.

I'NCUBUS. From *incubo,* to lie upon; because the patient fancies that something lies upon his chest.) See *Night-mare,* and *Oneirodynia.*

INCUS. (A smith's anvil, from *incudo,* to smite upon; so named from its likeness in shape to an anvil.) The largest and strongest of the bones of the ear in the tympanum. It is divided into a body and two crura. Its body is situated anteriorly, is rather broad and thick, and has two eminences and two depressions, both covered with cartilage, and intended for the reception of the head of the malleus. Its shorter crus extends no farther than the cells of the mastoid apophysis. Its longer crus, together with the manubrium of the malleus, to which it is connected by a ligament, is of the same extent as the shorter; but its extremity is curved inwards, to receive the os orbiculare, by the intervention of which it is united with the stapes.

I'NDEX. (From *indico,* to point out; because it is generally used for such purposes.) The fore-finger.

Indian arrow-root. See *Maranta.*

Indian cress. See *Tropæolum majus.*

Indian date-plum. The fruit of the *Diospyrus lotus* of Linnæus. When ripe, it has an agreeable taste, and is very nutritious.

Indian leaf. See *Laurus Cassia.*

Indian pink. See *Spigelia.*

INDIAN RUBBER. The substance known by the names Indian rubber, Elastic gum, Cayenne resin, Caütchuc, and by the French Caoutchouc, is prepared from the juice of the *Siphonia elastica;—foliis ternatis ellipticis integerrimis subtus canis longe petiolatis.* Suppl. plant. The manner of obtaining this juice is by making incisions through the bark of the lower part of the trunk of the tree, from which the fluid resin issues in great abundance, appearing of a milky whiteness as it flows into the vessel placed to receive it, and into which it is conducted by means of a tube or leaf fixed in the incision, and supported with clay. On exposure to the air, this milky juice gradually inspissates into a soft, reddish, elastic, resin. It is formed by the Indians in South America into various figures, but is commonly brought to Europe in that of pear-shaped bottles, which are said to be formed by spreading the juice of the Siphonia over a proper mould of clay; as soon as one layer is dry, another is added, until the bottle be of the thickness desired. It is then exposed to a thick dense smoke, or to a fire, until it becomes so dry as not to stick to the fingers, when, by means of certain instruments of iron, or wood, it is ornamented on the outside with various figures. This being done, it remains only to pick out the mould, which is easily effected by softening it with water. Indian rubber may be subjected to the action of some of the most powerful menstrua, without suffering the least change, while its pliability and elasticity are eminently peculiar to itself. Its proper menstruum is known to some persons in England, who keep it a profound secret, and prepare the gum into beautiful catheters, bougies, syringes, pessaries, &c.

Indian wheat. See *Zea mays.*

India'na ra'dix. Ipecacuanha.

I'ndica camo'tes. Potatoes.

I'NDICANS. Indicant. The proximate cause of a disease, or that from which the indication is drawn.

Indicating days, are the same as critical days.

INDICA'TION. (*Indicatio; from indico*, to show.) An indication is that which demonstrates in a disease what ought to be done. It is three-fold: preservative, which preserves health; curative, which expels a present disease; and vital, which respects the powers and reasons of diet. The scope from which indications are taken, or determined, is comprehended in this distich:

> —— *Ars, ætas, regio, complexio, virtus,*
> *Mos et symptoma, repletio, tempus et usus.*

INDICA'TOR. (From *indico*, to point; so named from its office of extending the index, or fore-finger.) *Extensor indicis* of Cowper. *Extensor secundi internodii indicis proprius, vulgo indicator* of Douglas, and *Cubito-sus phalangettien de l'indix* of Dumas. An extensor muscle of the fore-finger, situated chiefly on the lower and posterior part of the fore-arm. It arises, by an acute fleshy beginning, from the middle of the posterior part of the ulna, its tendon passes under the same ligament with the extensor digitorum communis with part of which it is inserted into the posterior part of the fore-finger.

I'ndicum li'gnum. Logwood.

I'ndicus. Sweet and bitter costus.

I'ndicus mo'rbus. The venereal disease.

INDI'GENOUS. (*Morbus indigenus; indigena ab indu, i. e. in et geno, i. e. gigno*, to beget.) Applied to diseases which are peculiar to any country.

Indura'ntia. (From *induro*, to harden.) Medicines which harden.

Indu'sium. (From *induo*, to put on.) A shirt. Also the name of the amnios, from its covering the fœtus like a shirt.

Ine'sis. (From *ιναω*, to evacuate.) *Inethus*. An evacuation of the humours.

INFECTION. See *Contagion*.

Infernal. A name given to a caustic, lapis infernalis, from its strong burning property.

Infibula'tio. (From *infibulo*, to button together.) An impediment to the retraction of the prepuce.

INFLAMMABLE. Chemists distinguish by this term such bodies of the mineral kingdom only as burn with facility, and flame in an increased temperature.

INFLAMMATION. (*Inflammatio*; from *inflammo*, to burn.) *Phlogosis. Phlegmasia.* A genus of disease in the class *pyrexiæ*, and order *phlegmasiæ*, of Cullen.

This disease is characterised by heat, pain, redness, attended with more or less of tumefaction and fever. Inflammation is divided into two species, viz. phlegmonous and erysipelatous.

Besides this division, inflammation is either acute or chronic, local or general, simple or complicated with other diseases.

Phlegmonous inflammation is known by its bright red colour, tension, heat, and a circumscribed, throbbing, painful tumefaction of the part; tending to suppuration. Phlegmon is generally used to denote an inflammatory tumour, situated in the skin, or cellular membrane. When the same disease affects the viscera, it is usually called phlegmonous inflammation.

Erysipelatous inflammation is considered as an inflammation of a dull red colour, vanishing upon pressure, spreading unequally, with a burning pain, the tumour scarcely perceptible, ending in vesicles, or desquamation. This species of inflammation admits of a division into erythema, when there is merely an affection of the skin, with very little of the whole system; and erysipelas, when there is general affection of the system.

The fever attending erysipelatous inflammation is generally synochus, or typhus, excepting when it affects very vigorous habits, and then it may be synocha.

The fever attending phlegmonous inflammation is almost always synocha. Persons in the prime of life, and in full vigour, with a plethoric habit of body, are most liable to the attacks of phlegmonous inflammation; whereas, those advanced in years, and those of a weak habit of body, irritable, and lean, are most apt to be attacked with erysipelatous inflammation.

Phlegmonous inflammation terminates in resolution, suppuration, gangrene, and scirrhus, or induration.

Resolution is known to be about to take place when the symptoms gradually abate; suppuration, when the inflammation does not readily yield to proper remedies, the throbbing increases, the tumour points externally, and rigors come on. Gangrene is about to take place when the pain abates, the pulse sinks, and cold perspirations come on. Scirrhus, or induration, is known by the inflammation continuing a longer time than usual; the tumefaction continues, and a considerable hardness remains. This kind of tumour gives little or no pain, and, when it takes place, it is usually the sequel of inflammation affecting glandular parts. It sometimes, however, is accompanied with lancinating pains, ulcerates, and becomes cancerous.

Erythematous inflammation terminates in resolution, suppuration, or gangrene. The symptoms of inflammation are accounted for in the following way:—

The redness arises from the dilatation of the small vessels, which become sufficiently large to admit the red particles in large quantities; it appears also to occur, in some cases, from the generation of new vessels. The swelling is caused by the dilatation of the vessels, the phlethoric state of the arteries and veins, the exudation of coagulable lymph into the interstices of the cellular membrane, and the interruption of absorption.

In regard to the augmentation of heat, as the thermometer denotes very little increase of temperature, it appears to be accounted for from the increased sensibility of the nerves, which convey false impressions to the sensorium. The pain is occasioned by a deviation from the natural state of the parts, and the unusual condition into which the nerves are thrown. The throbbing depends on the increased action of the arteries.

Blood taken from a person labouring under active inflammation, exhibits a yellowish white crust on the surface; this is denominated the buffy coriaceous, or inflammatory coat. This consists of a layer of coagulable lymph, almost destitute of red particles. Blood, in this state, is often termed sizy. The colouring part of the blood is its heaviest constituent: and, as the blood of a person labouring under inflammation is longer coagulating than healthy blood, it is supposed that the red particles have an opportunity to descend to a considerable depth from the surface before they become entangled. The buffy coat of blood is generally the best criterion of inflammation; there are a few anomalous constitutions in which this state of blood is always found; but these are rare.

The occasional and exciting causes of inflammation are very numerous; they, however, may generally be classed under external violence, produced either by mechanical or chemical irritation, changes of temperature, and stimulating foods. Fever often seems to be a remote cause; the inflammation thus produced is generally considered as critical. Spontaneous inflammation sometimes occurs when no perceptible cause can be assigned for its production. Scrophula and syphilis may be considered as exciting causes of inflammation.

With regard to the proximate cause, it has been the subject of much dispute. Galen considered phlegmon to be produced by a superabundance of the humor sanguineus. Boerhaave referred the proximate cause to an obstruction in the small vessels, occasioned by a viscosity or lentor of the blood. Cullen and others attributed it rather to an affection of the vessels than a change of the fluids.

The proximate cause, at the present period, is generally considered to be a morbid dilatation, and increased action of such arteries as lead and are distributed to the inflamed part.

Inflammation of the brain. See *Phrenitis.*

Inflammation of the bladder. See *Cystitis.*

Inflammation of the eyes. See *Ophthalmia.*

Inflammation of the intestines. See *Enteritis.*

Inflammation of the kidneys. See *Nephritis.*

Inflammation of the liver. See *Hepatitis.*

Inflammation of the lungs. See *Pneumonia.*

Inflammation of the peritonæum. See *Peritonitis.*

Inflammation of the pleura. See *Pleuritis.*

Inflammation of the stomach. See *Gastritis.*

Inflammation of the testicle. See *Hernia humoralis.*

Inflammation of the uterus. See *Hysteritis.*

INFLA'TIO. (From *inflo*, to puff up.) A windy tumour, or swelling. See *Emphysema.*

INFLATI'VA. (From *inflo*, to puff up with wind.) Medicines or food which cause flatulence.

INFLUE'NZA. (The Italian word for influence.) The disease is so named because it was supposed to be produced by a peculiar influence of the stars. See *Catarrhus à contagio.*

INFRASCAPULA'RIS. (From *infra*, beneath, and *scapula*, the shoulder-blade.) A muscle named from its position beneath the scapula.

INFRASPINA'TUS. (From *infra*, beneath, and *spina*, the spine.)

INFUNDI'BULUM. (From *infundo*, to pour in.) 1. A canal that proceeds from the vulva of the brain to the pituitary gland in the sella turcica.

2. The beginnings of the excretory duct of the kidney, or cavities into which the urine is first received, are called *infundibula.*

INFUSION. (*Infusum*; from *infundo*, to pour in.) *Infusio.* A process that consists in pouring water of any required degree of temperature on such substances as have a loose texture, as thin bark, wood in shavings, or small pieces, leaves, flowers, &c. and suffering it to stand a certain time. The liquor obtained by the above process is called an *infusion.* The following are among the most approved infusions.

INFU'SUM ANTHE'MIDIS. Infusion of camomile. "Take of camomile-flowers, two drachms; boiling water, half a pint. Macerate for ten minutes, in a covered vessel, and strain." For its virtues, see *Anthemis nobilis.*

INFU'SUM ARMORA'CIÆ COMPO'SITUM. Compound infusion of horse-radish. "Take of fresh horse-radish root, sliced, mustard-seeds bruised, of each one ounce; boiling water, a pint. Macerate for two hours, in a covered vessel, and strain; then add compound spirit of horse-radish, a fluid ounce." See *Cochlearia armoracia.*

Infu'sum aura'ntii compo'situm. Compound infusion of orange-peel. "Take of orange-peel, dried, two drachms; lemon-peel, fresh, a drachm; cloves, bruised, half a drachm; boiling water, half a pint. Macerate for a quarter of an hour, in a covered vessel, and strain." See *Citrus aurantium*.

Infu'sum calu'mbæ. Infusion of calumba. "Take of calumba-root, sliced, a drachm; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Calumba*.

Infu'sum caryophyllo'rum. Infusion of cloves. "Take of cloves, bruised, a drachm; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Eugenia caryophyllata*.

Infu'sum cascari'llæ. Infusion of cascarilla. "Take of cascarilla bark, bruised, half an ounce; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Croton cascarilla*.

Infu'sum ca'techu compositum. Compound infusion of catechu. "Take of extract of catechu, two drachms and a half; cinnamon bark, bruised, half a drachm; boiling water half a pint. Macerate for an hour, in a covered vessel, and strain." See *Acacia catechu*.

Infu'sum cincho'næ. Infusion of cinchona. "Take of lance-leaved cinchona bark, bruised, half an ounce; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Cinchona*.

Infu'sum cuspa'riæ. Infusion of cusparia. "Take of cusparia bark, bruised, two drachms; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Cusparia febrifuga*.

Infu'sum digita'lis. Infusion of foxglove. "Take of purple fox-glove leaves, dried, a drachm; boiling water, half a pint. Macerate for four hours, in a covered vessel, and strain; then add spirit of cinnamon, half a fluid ounce." See *Digitalis*.

Infu'sum gentia'næ compo'situm. Compound infusion of gentian. "Take of gentian-root, sliced, orange-peel, dried, of each a drachm; lemon-peel, fresh, two drachms; boiling water, twelve fluid ounces. Macerate for an hour, in a covered vessel, and strain." See *Gentiana*.

Infu'sum li'ni. Infusion of linseed. "Take of linseed, bruised, an ounce; liquorice-root, sliced, half an ounce; boiling water, two pints. Macerate for two hours, near the fire, in a covered vessel, and strain." See *Linum usitatissimum*.

Infu'sum qua'ssiæ. Infusion of quassia. "Take of quassia wood, a scruple; boiling water, half a pint. Macerate for two hours, and strain." See *Quassia amara*.

Infu'sum rhe'i. Infusion of rhubarb. "Take of rhubarb-root, sliced, a drachm; boiling water, half a pint. Macerate for two hours, and strain." See *Rheum*.

Infu'sum ro'sæ. "Take of the petals of red rose, dried, half an ounce; boiling water, two pints and a half; dilute sulphuric acid, three fluid drachms; double-refined sugar, an ounce and a half. Pour the water upon the petals of the rose in a glass vessel; then add the acid, and macerate for half an hour. Lastly, strain the infusion, and add the sugar to it." See *Rosa Gallica*.

Infu'sum se'nnæ. Infusion of senna. "Take of senna-leaves, an ounce and a half; ginger-root, sliced, a drachm; boiling water, a pint. Macerate for an hour, in a covered vessel, and strain the liquor." See *Cassia senna*.

Infu'sum simarou'bæ. Infusion of simarouba. "Take of simarouba-bark, bruised, half a drachm; boiling water, half a pint. Macerate for two hours, in a covered vessel, and strain." See *Quassia simarouba*.

Infu'sum taba'ci. Infusion of tobacco. "Take of tobacco-leaves, a drachm; boiling water, a pint. Macerate for an hour, in a covered vessel, and strain." See *Nicotiana*.

INGENHOUZ, John, was born at Breda, in 1730. Little is known of his early life; but in 1767 he came to England to learn the Suttonian method of inoculation. In the following year he went to Vienna, to inoculate some of the imperial family, for which service he received ample honours; and shortly after performed the same operation on the Grand Duke of Tuscany; when he returned to this country, and spent the remainder of his life in scientific pursuits. In 1779 he published "Experiments on Vegetables," discovering their great power of purifying the air in sunshine, but injuring it in the shade and night. He was also author of several papers in the Philosophical Transactions, being an active member of the Royal Society. He died in 1799.

Inglu'vies. The claw, crop, or gorge of a bird. Also gluttony.

INGRASSIAS, John Philip, was born in Sicily, and graduated at Padua in 1537, with singular reputation; whence he was invited to a professorship in several of the Italian schools: but he gave the preference to Naples, where he distinguished himself greatly by his learning and judgment. At length he returned to his native island, and settled at Palermo, where he was also highly esteemed; and in 1563 made first physician to that country by Philip II. of Spain, to whom it then belonged. This office enabled him to introduce excellent regulations into the medical practice of the island; and when the plague raged there in 1575, the judicious measures adopted by him arrested its progress; whence the magistrates decreed him a large reward, of which, however, he only accepted a part, and applied that to religious uses. He died in 1580, at the age of 70. He cultivated anatomy with great assiduity, and is reckoned one of the improvers of that art, especially in regard to the structure of the cranium, and the organ of hearing. He is said also to have discovered the seminal vesicles. He published several works, particularly an account of the plague; and a treatise "De Tumoribus præter Naturam," which is chiefly a commentary on Avicenna, but is deserving of notice, as containing the first modern description of Scarlatina, under the name of Rossalia; and perhaps the first account of varicella, which he called crystalli. But his principal work was published by his nephew in 1603, entitled, "Commentaries on Galen's Book concerning the Bones."

Ingravidation. (From *ingravidor*, to be great with child.) The same as impregnation, or going with child.

I'NGUEN. (*-inis*, n.) The groin. The lower and lateral part of the abdomen, above the thigh.

Inguinal ligament. See *Poupart's ligament.*

Inguinal hernia. See *Hernia.*

Inhumation. (From *inhumo*, to put into the ground.) The burying a patient in warm or medicated earth. Some chemists have fancied thus to call that kind of digestion which is performed by burying the materials in dung, or in the earth.

I'nion. (From ις, a nerve; as being the place where nerves originate.) The occiput. Blancard says it is the beginning of the spinal marrow: others say it is the back part of the neck.

Injacula'tio. (From *injaculor*, to shoot into.) So Helmont calls a disorder which consists of a violent spasmodic pain in the stomach, and an immobility of the body.

INJE'CTION. (From *injicio*, to cast into.) A medicated liquor to throw into a natural or preternatural cavity of the body by means of a syringe.

INNOMINA'TA ARTE'RIA. The first branch given off by the arch of the aorta. It soon divides into the right carotid and right subclavian arteries.

INNOMINA'TUM OS. (*Innominatus*; from *in*, priv. and *nomen*, a name; so called because the three bones of which it originally was formed grew together, and formed one complete bone, which was then left nameless.) A large irregular bone, situated at the side of the pelvis. It is divided into three portions, viz. the iliac, ischiatic, and pubic, which are usually described as three distinct bones.

The os ilium, or haunch-bone, is of a very irregular shape. The lower part of it is thick and narrow; its superior portion is broad and thin, terminating in a ridge, called the *spine* of the ilium, and more commonly known by the name of the *haunch.* This spine rises up like an arch, being turned somewhat outward, and from this appearance, the upper part of the pelvis, when viewed together, has not been improperly compared to the wings of a phaeton. This spine, in the recent subject, appears as if tipped with cartilage; but this appearance is nothing more than the tendinous fibres of the muscles that are inserted into it. Externally, this bone is unequally prominent, and hollowed for the attachment of muscles; and internally, at its broadest fore-part, it is smooth and concave. At its lower part, there is a considerable ridge on its inner surface. This ridge, which extends from the os sacrum, and corresponds with a similar prominence, both on that bone and the ischium, forms, with the inner part of the ossa pubis, what is called the brim of the pelvis. The whole of the internal surface, behind this ridge, is very unequal. The os ilium has likewise a smaller surface posteriorly, by which it is articulated to the sides of the os sacrum. This surface has, by some, been compared to the human ear, and, by others, to the head of a bird; but neither of these comparisons seem to convey any just idea of its form or appearance. Its upper part is rough and porous; lower down it is more solid. It is firmly united to the os sacrum by a cartilaginous substance, and likewise by very strong ligamentous fibres, which are extended to that bone from the whole circumference of this irregular surface. The spine of this bone, which is originally an epiphysis, has two considerable tuberosities, one anteriorly, and the other posteriorly, which is the largest of the two. The ends of this spine too, from their projecting more than the parts of the bone below them, are called spinal processes. Before the anterior spinal process, the spine is hollowed, where part of the Sartorius muscle is placed; and below the posterior spinal process, there is a very large niche in the bone, which, in the recent subject, has a strong ligament stretched over its lower part, from the os sacrum to the sharp-pointed process of the ischium; so that a great hole is formed, through which pass the great sciatic nerve and the posterior crural vessels under the pyriform muscle, part of which is likewise lodged in this hole. The lowest, thickest, and narrowest part of the ilium, in conjunction with the other two portions of each os innominatum, helps to form the acetabulum for the os femoris.

The os ischium, or hip-bone, which is the lowest of the three portions of each os innominatum, is of a very irregular figure, and usually divided into its body, tuberosity, and ramus. The body, externally, forms the inferior portion of the acetabulum, and sends a sharp-pointed process backwards, called the spine of the ischium. This is the process to which the ligament is attached, which was just now described as forming a great foramen for the passage of the sciatic nerve. The tuberosity is large and irregular, and is placed at the inferior part of the bone, giving origin to several muscles. In the recent subject, it seems covered with a cartilaginous crust; but this appearance, as in the spine of the ilium, is nothing more than the tendinous fibres of the muscles that are inserted into it. This tuberosity, which is the lowest portion of the trunk, supports us when we sit. Between the spine and the tuberosity is observed a sinuosity, covered with a cartilaginous crust, which serves as a pulley, on which the obturator muscle plays. From the tuberosity, the bone becoming narrower and thinner, forms the ramus, or branch, which passing forwards and upwards, makes, with the ramus of the os pubis, a large hole, of an oval shape, the *foramen magnum ischii,* which affords, through its whole circumference, attachment to muscles. This foramen is more particularly noticed in describing the os pubis.

The os pubis, or share-bone, which is the smallest of the three portions of the os innominatum, is placed at the upper and fore part of the pelvis, where the two ossa pubis meet, and are united to each other by means of a very strong cartilage, which constitutes what is called the *symphysis pubis.* Each os pubis may be divided into its body, angle, and ramus. The body, which is the outer part, is joined to the os ilium. The angle comes forward to form the symphysis, and the ramus is a thin apophysis, which, uniting with the ramus of the ischium, forms the *foramen magnum ischii,* or *thyroideum,* as it has been sometimes called, from its resemblance to a door or shield. This foramen is somewhat wider above than below, and its greatest diameter is, from above downwards, and obliquely from within outwards. In the recent subject, it is almost completely closed by a strong fibrous membrane, called the *obturator* ligament. Upwards and outwards, where we observe a niche in the bone, the fibres of this ligament are separated, to allow a passage to the posterior crural nerve, an artery and vein. The great uses of this foramen seem to be to lighten the bones of the pelvis, and to afford a convenient lodgment to the obturator muscles. The three bones now described as constituting the os innominatum on each side, all concur to form the great acetabulum, or cotyloid cavity, which receives the head of the thigh-bone; the os ilium and os ischium making each about two-fifths, and the os pubis one-fifth, of the cavity. This acetabulum which is of considerable depth, is of a spherical shape. Its brims are high, and, in the recent subject, it is tipped with cartilage. These brims, however, are higher above and externally than they are internally and below, where we observe a niche in the bone (namely the ischium), across which is stretched a ligament, forming a hole for the transmission of blood-vessels and nerves to the cavity of the joint. The cartilage which lines the acetabulum, is thickest at its circumference, and thinner within, where a little hole is to be observed, in which is placed the apparatus that serves to lubricate the joint, and facilitate its motions. We are likewise able to discover the impression made by the internal ligament of the os femoris, which, by being attached both to this cavity and to the head of the os femoris, helps to secure the latter in the acetabulum. The bones of the pelvis serve to support the spine and upper parts of the body, to lodge the intestines, urinary bladder, and other viscera; and likewise to unite the trunk to the lower extremities. But, besides these uses, they are destined, in the female subject, for other important purposes; and the accoucheur finds, in the study of these bones, the foundation of all midwifery knowledge. Several eminent writers are of opinion, that in difficult parturition, all the bones of the pelvis undergo a certain degree of separation. It has been observed likewise, that the cartilage uniting the ossa pubis is thicker, and of a more spongy texture, in women than in men, and therefore more likely to swell and enlarge during pregnancy. That many instances of a partial separation of these bones, during labour, have happened, there can be no doubt; such a separation, however, ought by no means to be considered as an uniform and salutary work of nature, as some writers seem to think, but as the effect of disease. But there is another circumstance, in regard to this part of osteology, which is well worthy of attention; and this is, the different capacities of the pelvis in the male and female subject. It has been observed, that the os sacrum is shorter and broader in women than in men; the ossa ilia are also found more expanded; whence it happens, that in women the centre of gravity does not fall so directly on the upper part of the thigh as in men, and this seems to be the reason, why, in general, they step with less firmness, and move their hips forwards in walking. From these circumstances also, the brim of the female pelvis is nearly of an oval shape, being considerably wider from side to side, than from the symphysis pubis to the os sacrum; whereas, in man it is rounder, and every where of less diameter. The inferior opening of the pelvis is likewise proportionably larger in the female subject, the ossa ischia being more separated from each other, and the foramen ischii larger, so that, where the os ischium and os pubis are united together, they form a greater circle; the os sacrum is also more hollowed, though shorter, and the os coccygis more loosely connected, and therefore capable of a greater degree of motion than in men.

Innomina'ti ne'rvi. A name of the fifth pair of nerves.

INOCULATION. The insertion of a poison into any part of the body. It was mostly practised with that of the small-pox, because we had learnt, from experience, that, by so doing, we generally procured fewer pustules, and a much milder disease, than when the small-pox was taken in a natural way. Although the advantages were evident, yet objections were raised against inoculation, on the notion that it exposed the person to some risk, when he might have passed through life, without ever taking the disease naturally; but it is obvious that he was exposed to much greater danger, from the intercourse which he must have with his fellow-creatures, by taking the disorder in a natural way. It has also been adduced, that a person is liable to take the small-pox a second time, when produced at first by artificial means; but such instances are very rare, besides not being sufficiently authentic. We may conjecture that, in most of those cases, the matter used was not variolous, but that of some other eruptive disorder, such as the chicken-pox, which has often been mistaken for the small-pox. However, since the discovery of the preventive power of the cow-pock, small-pox inoculation has been rapidly falling into disuse. See *Variola vaccina.*

To illustrate the benefits arising from inoculation, it has been calculated that a third of the adults die who take the disease in a natural way, and about one-seventh of the children; whereas, of those who are inoculated, and are properly treated afterwards, the proportion is probably not greater than one in five or six hundred.

Inoculation is generally thought to have been introduced into Britain from Turkey, by Lady Mary Wortley Montague, about the year 1721, whose son had been inoculated at Constantinople, during her residence there, and whose infant daughter was the first that underwent the operation in this country. It appears, however, to have been well known before this period, both in the South of Wales and Highlands of Scotland. Mr. Mungo Park, in his travels into the interior of Africa, found that inoculation had been long practised by the negroes on the Guinea coast; and nearly in the same manner, and at the same time of life, as in Europe.

It is not clearly ascertained where inoculation really originated. It has been ascribed to the Circassians, who employed it as the means of preserving the beauty of their women. It appears more probable that accident first suggested the expedient among different nations, to whom the small-pox had long been known, independently of any intercourse with each other; and what adds to the probability of this conjecture is, that in most places where inoculation can be traced back, for a considerable length of time, it seems to have been practised chiefly by old women, before it was adopted by regular practitioners.

Many physicians held inoculation in the greatest contempt at first, from its supposed origin; others again discredited the fact of its utility; while others, on the testimony of the success in distant countries, believed in the advantages it afforded, but still did not think themselves warranted to recommend it to the families they attended; and it was not until the experiment of it had been made on six criminals (all of whom recovered from the disease, and regained their liberty,) that it was practised, in the year 1726, on the royal family, and afterwards adopted as a general thing.

To insure success from inoculation, the following precautions should strictly be attended to.

1. That the person should be of a good habit of body, and free from any disease, apparent or latent, in order that he may not have the disease and a bad constitution, or perhaps another disorder, to struggle with at the same time.

2. To enjoin a temperate diet and proper regimen; and, where the body is plethoric, or gross, to make use of gentle purges, together with mercurial and antimonial medicines.

3. That the age of the person be as little advanced as possible, but not younger, if it can be avoided, than four months.

4. To choose a cool season of the year, and to avoid external heat, either by exposure to the sun, sitting by fires, or in warm chambers, or by going too warmly clothed, or being too much in bed.

5. To take the matter from a young subject, who has the small-pox in a favourable way, and who is otherwise healthy, and free from disease; and, when fresh matter can be procured, to give it the preference.

Where matter of a benign kind cannot be procured, and the patient is evidently in danger of the casual small-pox, we should not, however, hesitate a moment to inoculate from any kind of matter that can be procured; as what has been taken in malignant kinds of small-pox has been found to produce a very mild disease.

The mildness or malignity of the disease appears, therefore, to depend little or not at all on the inoculating matter. Variolous matter, as well as the vaccine, by being kept for a length of time, particularly in a warm place, is apt, however, to undergo decomposition, by putrefaction; and then another kind of contagious material has been produced.

In inoculating, the operator is to make the slightest puncture or scratch imaginable in the arm of the person, rubbing that part of the lancet which is besmeared with matter repeatedly over it, by way of insuring the absorption; and in order to prevent its being wiped off, the shirt sleeve ought not to be pulled down until the part is perfectly dry.

A singular circumstance attending inoculation is, that when this fails in producing the disease, the inoculated part nevertheless sometimes inflames and suppurates, as in cases where the complaint is about to follow; and the matter produced in those cases, is as fit for inoculation as that taken from a person actually labouring under the disease. The same happens very frequently in inoculation for the cow-pox.

If, on the fourth or fifth day after the operation, no redness, or inflammation, is apparent on the edge of the wound, we ought then to inoculate in the other arm, in the same manner as before; or, for greater certainty, we may do it in both.

Some constitutions are incapable of having the disease in any form. Others do not receive the disease at one time, however freely exposed to its contagion, even though repeatedly inoculated, and yet receive it afterwards by merely approaching those labouring under it.

On the coming on of the febrile symptoms, which is generally on the seventh day in the inoculated small-pox, the patient is not to be suffered to lie a-bed, but should be kept cool, and partake freely of antiseptic cooling drinks. See *Variola*.

INOSCULA'TION. (From *in*, and *osculum*, a little mouth.) The running of the veins and arteries into one another, or the interunion of the extremities of arteries and veins.

INSA'NIA. (From *in*, not, and *sanus*, sound.) Insanity, or deranged intellect. A genus of disease in the class *neuroses*, and order *vesaniæ*, characterized by erroneous judgment, from imaginary perceptions, or recollections, attended with agreeable emotions in persons of a sanguine temperament. See *Mania*.

Inse'ssus. (From *insideo*, to sit upon.) A vapour-bath, over which the patient sits.

Insi'dians. (From *insidior*, to deceive.) A name for diseases which betray no previous symptoms, but are ready to break out by surprise.

Insipie'ntia. (From *in*, and *sapientia*, wisdom.) A low degree of delirium, without fever.

Insola'tio. (From *in*, upon, and *sol*, the sun.) A disease which arises from a too great influence of the sun's heat upon the head.

INSPIRA'TION. (From *in*, and *spiro*, to breathe.) The act of drawing the air into the lungs. See *Respiration*.

INTERCO'STAL A'RTERIES. *Arteriæ intercostales.* The arteries which run between the ribs. The superior intercostal artery is a branch of the subclavian. The other intercostal arteries are given off from the aorta.

INTERCO'STAL MU'SCLES. *Intercostales externi et interni.* Between the ribs on each side, are eleven double rows of muscles. These are the *intercostales externi* and *interni*. Galen has very properly observed, that they decussate each other like the strokes of the letter X. The *intercostales externi* arise from the lower edge of each superior rib, and, running obliquely downwards and forwards, are inserted into the upper edge of each inferior rib, so as to occupy the intervals of the ribs, from as far back as the spine to their cartilages; but from their cartilages to the sternum, there is only a thin aponeurosis covering the internal intercostales. The *intercostales interni* arise and are inserted in the same manner as the external. They begin at the sternum, and extend as far as the angles of the ribs, their fibres running obliquely backwards. These fibres are spread over a considerable part of the inner surface of the ribs, so as to be longer than those of the external intercostals. Some of the posterior portions of the internal intercostals pass over one rib and are inserted into the rib below. Verheyen first described these portions as separate muscles, under the name of *infra costales.* Winslow has adopted the same name. Cowper, and after him Douglas, call them *costarum depressores proprii.* These distinctions, however, are altogether superfluous, as they are evidently nothing more than appendages of the intercostals. The number of these portions varies in different subjects. Most commonly there are only four, the first of which runs from the second rib to the fourth, the second from the third rib to the fifth, the third from the fourth rib to the sixth, and the fourth from the fifth rib to the seventh. The internal intercostals of the two inferior false ribs are frequently so thin, as to be with difficulty separated from the external; and, in some subjects, one or both of them seem to be altogether wanting. It was the opinion of the antients, that the external intercostals serve to elevate, and the internal to depress the ribs. They were probably led to this opinion, by observing the different direction of their fibres; but it is now well known, that both have the same use, which is that of raising the ribs equally during inspiration. Fallopius was one of the first who ventured to call in question the opinion of Galen on this subject, by contending that both layers of the intercostals serve to elevate the ribs. In this opinion he was followed by Hieronymus Fabricius, our countryman Mayow, and Borelli. But, towards the close of the last century, Bayle, a writer of some eminence, and professor at Toulouse, revived the opinion of the antients by the following arguments;—He observed, that the oblique direction of the fibres of the internal intercostals is such, that, in each inferior rib, these fibres are nearer to the vertebræ than they are at their superior extremities, or in the rib immediately above; and that, of course, they must serve to draw the rib downwards, as towards the most fixed point. This plausible doctrine was adopted by several eminent writers, and, amongst others, by Nicholls, Hoadley, and Schreiber; but above all, by Hamberger, who went so far as to assert, that not only the ribs, but even the sternum, are pulled downwards by these muscles, and constructed a particular instrument to illustrate this doctrine. He pretended likewise, that the intervals of the ribs are increased by their elevation, and diminished by their depression; but he allowed that, while those parts of the internal intercostals that are placed between the bony part of the ribs pull them downwards, the anterior portions of the muscle, which are situated between the cartilages, concur with the external intercostals in raising them upwards. These opinions gave rise to a warm and interesting controversy, in which Hamberger and Haller were the principal disputants. The former argued chiefly from theory, and the latter from experiments on living animals, which demonstrate the fallacy of Hamberger's arguments, and prove beyond a doubt, that the internal intercostals perform the same functions as the external.

INTERCO'STAL NERVE. *Nervus intercostalis,* Great intercostal nerve. Sympathetic nerve. The great intercostal nerve arises in the cavity of the cranium, from a branch of the sixth and one of the fifth pair, uniting into one trunk, which passes out of the cranium through the carotid canal, and descends by the sides of the bodies of the vertebræ of the neck, thorax, loins, and os sacrum: in its course, it receives the small accessory branches from all the thirty pair of spinal nerves. In the neck, it gives off three cervical ganglions, the upper, middle, and lower; from which the cardiac and pulmonary nerves arise. In the thorax, it gives off the splanchnic or anterior intercostal, which perforates the diaphragm, and forms the semilunar ganglions, from which nerves pass to all the abdominal viscera. They also form in the abdomen ten peculiar plexuses, distinguished by the name of the viscus, to which they belong, as the cœliac, splenic, hepatic, superior, middle, and lower, mesenteric, two renal, and two spermatic plexuses. The posterior intercostal nerve gives accessory branches about the pelvis and ischiatic nerve, and at length terminates.

INTERCO'STAL VEINS. The intercostal veins empty their blood into the vena azygos.

INTERCU'RRENT FEVERS. Those which happen in certain seasons only, are called stationary: but others are called, by Sydenham, intercurrents.

INTE'RCUS. (From *inter,* between, and *cutem,* the skin.) A dropsy between the skin and the flesh. See *Anasarca.*

INTERDE'NTIUM. (From *inter.* between, and *dens,* a tooth.) The intervals between teeth of the same order.

INTERDI'GITUM. (From *inter,* between, and *digitus,* a toe, or finger.) A corn betwixt the toes, or wart betwixt the fingers.

INTERFÆMI'NEUM. (From *inter,* between, and *fæmen,* the thigh.) The perinæum, or space between the anus and pudendum.

INTERLU'NIUS MO'RBUS. (From *inter,* between, and *luna,* the moon; because it was supposed to affect those who were born in the wane of the moon.) The epilepsy.

Intermittent fever. See *Febris intermittens.*

INTERNU'NTII DI'ES. (From *internuncio,* to go between.) Applied to critical days, or such as stand between the increase of a disorder and its decrease.

INTERO'SSEI MA'NUS. (*Interosseus musculus;* from *inter,* between, and *os,* the bone.) These are small muscles situated between the metacarpal bones, and extending from the bones of the carpus to the fingers. They are divided into *internal* and *external;* the former are to be seen only on the palm of the hand, but the latter are conspicuous both on the palm and back of the hand. The *interossei interni* are three in number. The first, which Albinus names *posterior indicis,* arises tendinous and fleshy from the basis and inner part of the metacarpal bone of the fore-finger, and likewise from the upper part of that which supports the middle finger. Its tendon passes over the articulation of this part of these bones with the fore-finger, and, uniting with the tendinous expansion that is sent off from the extensor digitorum communis, is inserted into the posterior convex surface of the first phalanx of that finger. The second and third, to which Albinus gives the names of *prior annularis,* and *interosseus auricularis,* arise, in the same manner, from the basis of the outsides of the metacarpal bones that sustain the ring-finger and the little finger, and are inserted into the outside of the tendinous expansion of the extensor digitorum communis that covers each of those fingers. These three muscles draw the fingers into which they are inserted, towards the thumb. The *interossei externi* are four in number; for among these is included the small muscle that is situated on the outside of the metacarpal bone that supports the fore-finger. Douglas calls it *extensor tertii internodii indicis,* and Winslow *semi interosseus indicis.* Albinus, who describes it among the interossei, gives it the name of *prior indicis.* This first interosseus externus arises by two tendinous and fleshy portions. One of these springs from the upper half of the inner side of the first bone of the thumb, and the other from the ligaments that unite the os trapezoides to the metacarpal bone of the fore-finger, and likewise from all the outside of this latter bone. These two portions unite as they descend, and terminate in a tendon, which is inserted into the outside of that part of the tendinous expansion from the extensor digitorum communis that is spread over the posterior convex surface of the fore-finger. The second, to which Albinus gives the name of *prior medii*, is not quite so thick as the last-described muscle. It arises by two heads, one of which springs from the inner side of the metacarpal bone of the fore-finger, chiefly towards its convex surface, and the other arises from the adjacent ligaments, and from the whole outer side of the metacarpal bone that sustains the middle finger. These two portions unite as they descend, and terminate in a tendon, which is inserted, in the same manner, as the preceding muscle, into the outside of the tendinous expansion that covers the posterior part of the middle finger. The third belongs likewise to the middle-finger, and is therefore named *posterior medii* by Albinus. It arises, like the last-described muscle, by two origins, which spring from the roots of the metacarpal bones of the ring and middle fingers, and from the adjacent ligaments, and is inserted into the inside of the same tendinous expansion as the preceding muscle. The fourth, to which Albinus gives the name of *posterior annularis*, differs from the two last only in its situation, which is between the metacarpal bones of the ring and little fingers. It is inserted into the inside of the tendinous expansion of the extensor digitorum communis, that covers the posterior part of the ring-finger. All these four muscles serve to extend the fingers into which they are inserted, and likewise to draw them inwards, towards the thumb, except the third, or *posterior medii*, which, from its situation and insertion, is calculated to pull the middle finger outwards.

INTERO'SSEI PE'DIS. These small muscles, in their situation between the metatarsal bones, resemble the interossei of the hand, and, like them, are divided into *internal* and *external*. The *interossei pedis interni* are three in number. They arise tendinous and fleshy, from the basis and inside of the metatarsal bones of the middle, the third, and the little toes, in the same manner as those of the hand, and they each terminate in a tendon that runs to the inside of the first joint of these toes, and from thence to their upper surface, where it loses itself in the tendinous expansion that is sent off from the extensors. Each of these three muscles serves to draw the toe into which it is inserted towards the great toe. The *interossei externi* are four in number. The first arises tendinous and fleshy from the outside of the root of the metatarsal bone of the great toe, from the os cuneiforme internum, and from the root of the inside of the metatarsal bone of the fore-toe. Its tendon is inserted into the inside of the tendinous expansion that covers the back part of the toes. The second is placed in a similar manner between the metatarsal bones of the fore and middle toes, and is inserted into the outside of the tendinous expansion on the back part of the fore-toe. The third and fourth are placed between the two next metatarsal bones, and are inserted into the outside of the middle and third toes. The first of these muscles draws the fore-toe inwards towards the great toe. The three others pull the toes, into which they are inserted, outwards. They all assist in extending the toes.

INTERPELLA'TUS MO'RBUS. (From *interpello*, to interrupt.) In Paracelsus it is a disease attended with irregular or uncertain paroxysms.

INTERPOLA'TUS DI'ES. (From *interpolo*, to renew.) In Paracelsus, these are the days interpolated betwixt two paroxysms.

INTERSCAPU'LIUM. (From *inter*, between, and *scapula*, the shoulder-blade.) That part of the spine which lies between the shoulders.

INTERSE'PTUM. (From *inter*, between, and *septum*, an inclosure.) The uvula and the septum narium.

INTERSPINA'LES CO'LLI. (*Interspinales musculi*; from *inter*, between, and *spina*, the spine.) The fleshy portions between the spinous processes of the neck, that draw these processes nearer to each other.

INTERSPINA'LES DO'RSI ET LUMBO'RUM. These are rather small tendons than muscles, that connect the spinal and transverse processes.

INTERTRANSVERSA'LES LUMBO'RUM. Four distinct small bundles of flesh, which fill up the spaces between the transverse processes of the vertebræ of the loins, and serve to draw them towards each other.

INTERTRI'GO. (From *inter*, between, and *tero*, to rub.) An excoriation about the anus, groins, axilla, or other parts of the body, attended with inflammation and moisture. It is most commonly produced by the irritation of the urine, from riding, or some acrimony in children.

INTE'STINES. (*Intestina*; from *intus*, within.) The convoluted membranous tube that extends from the stomach to the anus; receives the ingested food, retains it a certain time; mixes with it the bile and pancreatic juice; propels the chyle into the lacteals, and covers the fæces with mucus, is so called. The intestines are situated in the cavity of the abdomen, and are divided into the small and large, which have, besides their size, other circumstances of distinction.

The *small* intestines are supplied internally with folds, called *valvulæ conniventes*, and have no bands on their external surface. The *large* intestines have no folds internally, and are supplied externally with three strong muscular bands, which run parallel upon the surface, and give the intestines a saccated appearance; and they have also small fatty appendages, called *appendiculæ epiploicæ*.

The first portion of the intestinal tube, for about the extent of twelve fingers' breadth, is called the *duodenum*; it lies in the epigastric region; makes three turnings, and between the first and second flexure receives, by a common opening, the pancreatic duct, and the ductus communis choledochus. It is in this portion of the intestines that chylification is chiefly performed. The remaining portion of the small intestines is distinguished by an imaginary division into the jejunum and ileum.

The *jejunum*, which commences where the duodenum ends, is situated in the umbilical region, and is mostly found empty; hence its name: it is every where covered with red vessels, and, about an hour and a half after a meal, with distended lacteals.

The *ileum* occupies the hypogastric region and the pelvis; is of a more pallid colour than the former, and terminates by a transverse opening into the large intestines, which is called the *valve of the ileum, valve of the cæcum, or the valve of Tulpius*.

The beginning of the large intestines is firmly tied down in the right iliac region, and for the extent of about four fingers' breadth is called the *cæcum*, having adhering to it a worm-like process, called the *processus cæci vermiformis*, or *appendicula cæci vermiformis*. The great intestine then commences *colon*, ascends towards the liver, passes across the abdomen, under the stomach, to the left side, where it is contorted like the letter *S*, and descends to the pelvis: hence it is divided in this course into the *ascending portion*, *the transverse arch*, and the *sigmoid flexure*. When it has reached the pelvis, it is called the *rectum*, from whence it proceeds in a straight line to the anus.

The intestinal canal is composed of three membranes, or coats; a *common* one from the peritoneum, a *muscular coat*, and a *villous coat*, the villi being formed of the fine terminations of arteries and nerves, and the origins of lacteals and lymphatics. The intestines are connected to the body by the mysentery; the duodenum has also a peculiar connecting cellular substance, as have likewise the colon and rectum, by whose means the former is firmly accreted to the back, the colon to the kidneys, and the latter to the os coccygis, and, in women, to the vagina. The remaining portion of the tube is loose in the cavity of the abdomen. The arteries of this canal are branches of the *superior* and *inferior mesenteric*, and the *duodenal*. The veins evacuate their blood into the vena portæ. The nerves are branches of the eighth pair and intercostals. The *lacteal vessels*, which originate principally from the jejunum, proceed to the glands in the mesentery.

INTRICA′TUS. (From *intrico*, to entangle; so called from its intricate folds.) A muscle of the ear.

INTRI′NSECI. (From *intra*, within, and *secus*, towards.) Painful disorders of the internal parts.

INTROCE′SSIO. (From *introcedo*, to go in.) *Depressio*. A depression or sinking of any part inwards.

INTUS SUSCE′PTION. (*Intus-susceptio* and *intro-susceptio*; from *intus*, within, and *suscipio*, to receive.) A disease of the intestinal tube, and most frequently of the small intestines; it consists in a portion of gut passing for some length within another portion.

I′NTYBUS. (From *in*, and *tuba*, a hollow instrument, so named from the hollowness of its stalk.) See *Cichorium Endivia*.

I′NULA. (Contracted or corrupted from *helenium*, ηλενιον, fabled to have sprung from the tears of Helen.) 1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*.

2. The herb elecampane.

Inula, common. See *Inula helenium*.

I′NULA DYSENTE′RICA. The systematic name of the lesser inula. *Conyza media*. This indigenous plant, called in some foreign pharmacopœias *Arnica Suedensis*, *Arnica spuria*, and *Conyza*, is thus described by Linnæus:—*Inula*: —*foliis amplexicaulibus, cordato oblongis; caule villoso, paniculato; squamis calycinis, setaceis*. It was once considered as possessing great antidysenteric virtues. The whole plant is to the taste acrid, and at the same time rather aromatic. It is now fallen into disuse.

I′NULA HELE′NIUM. The systematic name of the elecampane. *Enula campana*. *Helenium*. Common inula, or elecampane. *Inula helenium; foliis amplexicaulibus ovatis rugosis subtus tomentosis, calycum squamis ovatis*, of Linnæus. This plant, though a native of Britain, is seldom met with in its wild state, but mostly cultivated. The root, which is the part employed medicinally, in its recent state, has a weaker and less grateful smell than when thoroughly dried; and kept for a length of time, by which it is greatly improved, its odour then approaching to that of Florentine orris root. It was formerly in high estimation in dyspepsia, pulmonary affections, and uterine obstructions, but is now fallen into disuse.

Inustion. (From *in*, and *uro*, to burn.) It is sometimes used for hot and dry seasons; but most commonly by surgeons for the operation of the cautery.

Inverecu'ndum os. (From *in*, not, and *verecundus*, modest.) A name of the os frontis, from its being regarded as the seat of impudence.

Inversion of the uterus. See *Uterus retroversion of.*

INVOLU'CRUM. (From *in*, and *volvo*, to wrap up; because parts are enclosed by it.) A name of the pericardium; also a name of other membranes which cover any part.

Io'des. (From *ιος*, verdigris.) Green matter thrown off by vomiting.

IODINE. This substance appears to have been discovered in the year 1811, by M. Courtois, a manufacturer of saltpetre at Paris; but for the investigation of its properties we are chiefly indebted to Gay Lussac and Sir Humphry Davy. It is obtained from *kelp*, evaporating the solution of this to separate the greater part of the common salt, then adding sulphuric acid, and boiling for some time, to get rid of the remaining muriatic acid, or any sulphuretted hydrogen present, finally mixing with the residue, in a small retort, a quantity of the black oxide of manganese, equal to the sulphuric acid employed, and applying heat, a violet vapour arises, which is to be condensed in a proper receiver. It appears in scales of a greyish black colour, with the metallic lustre, nearly five times the weight of water. It has an acrid taste, and an odour like that of chlorine, but much weaker; it agrees also in destroying vegetable colours, though more slowly. It melts a few degrees above the boiling point, and volatilises about 350. It is very sparingly soluble in water, but more so in alcohol, or sulphuric ether. In most of the compounds, which it forms with other substances, it bears a strong analogy to chlorine. With starch it combines into a compound of a fine blue colour, which affords the means of detecting the most minute quantity of it. It appears to exist in various marine plants, besides that from which kelp is usually obtained.

I'onis. (From *ιον*, a violet.) A carbuncle of a violet colour.

Io'nthus. (From *ιον*, a violet, and *ανθος*, a flower.) A hard pimple in the face, of a violet colour.

Iotaci'smus. (From *ιωτα*, the Greek letter *ι*.) A defect in the tongue, or organs of speech, which renders a person incapable of pronouncing his letters.

Ioui. A restorative alimentary liquor, prepared in Japan. It is made from the gravy of half-roasted beef; but as to the rest, it is kept a secret.

Ipecacua'nha. (An Indian word.) See *Callicocca.*

Iqueta'ia. The inhabitants of the Brazils give this name to the *Scrophularia aquatica*, which is there celebrated as a corrector of the ill flavour of senna.

Iracu'ndus. (From *ira*, anger; so called because it forms the angry look.) A muscle of the eye.

I'RIS. (A rainbow; so called because of the variety of its colours.) 1. The anterior portion of the continuation of the choroid membrane of the eye, which is perforated in the middle by the pupil. It is of various colours. The posterior surface of the iris is termed the *uvea.*

2. The *flower-de-luce* is also called iris, from the resemblance of its flowers to the rainbow.

3. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Monogynia.*

I'ris Florenti'na. Florentine orris, or iris. The root of this plant, *Iris florentina*; *corollis barbatis, caule foliis altiore subbifloro, floribus sessilibus*, of Linnæus: which is indigenous to Italy, in its recent state is extremely acrid, and, when chewed, excites a pungent heat in the mouth, that continues several hours: on being dried, this acrimony is almost wholly dissipated; the taste is slightly bitter, and the smell agreeable, and approaching to that of violets. The fresh root is cathartic, and for this purpose has been employed in dropsies. It is now chiefly used in its dried state, and ranked as a pectoral and expectorant, and hence has a place in the *trochisci amyli* of the pharmacopœias.

Iris Florentine. See *Iris Florentina.*

I'ris Germa'nica. The systematic name of the flower-de-luce. *Iris nostras.* Common iris, or orris. Flower-de-luce. This plant is the *Iris germanica*; *corollis barbatis. caule foliis altiori multifloro, floribus inferioribus pedunculatis*, of Linnæus. The fresh roots have a strong disagreeable smell, and an acrid nauseous taste. They are powerfully cathartic, and are given in dropsical diseases, where such remedies are indicated.

I'ris no'stras. See *Iris Germanica.*

I'ris palu'stris. See *Iris pseudacorus.*

I'ris pseuda'corus. The systematic name of the yellow water-flag. *Iris Palustris. Gladiolus luteus. Acorus vulgaris.* Yellow water-flag. This indigenous plant, *Iris pseudacorus*; *imberbis, foliis ensiformibus, petalis alternis, stigmatibus minoribus*, is common in marshes, and on the banks of rivers. It formerly had a place in the London Pharmacopœia under the name of *gladiolus luteus.* The root is without smell, but has an acrid styptic taste, and its juice, on being snuffed up the nostrils, produces a burning heat in the nose and mouth, accompanied by a copious discharge from these organs; hence it is recommended both as an errhine and sialagogue. Given internally, when perfectly dry, its adstringent qualities are such as to cure diarrhœas.

The expressed juice is likewise said to be an useful application to serpiginous eruptions and scrophulous tumours.

Irish slate. See *Lapis Hybernicus.*

IRON. *Ferrum.* Of all the metals, there is none which is so copiously and so variously dispersed through nature as iron. In animals, in vegetables, and in all parts of the mineral kingdom, we detect its presence. Mineralogists are not agreed with respect to the existence of native iron, though immense masses of it have been discovered, which could not have been the products of art; but there is much in favour of the notion that these specimens have been extracted by subterraneous fire. A mass of native iron, of 1600 pounds weight, was found by Pallas, on the river Denisei, in Siberia; and another mass of 300 pounds was found in Paraguay, of which specimens have been distributed every where. A piece of native iron, of two pounds weight, has been also met with at Kamsdorf, in the territories of Neustadt, which is still preserved there. These masses evidently did not originate in the places where they were found.

There are a vast variety of iron ores; they may, however, be all arranged under the following genera; namely, sulphurets, carburets, oxides, and salts of iron. The sulphurets of iron form the ores called *pyrites*, of which there are many varieties. Their colour is, in general, a straw-yellow, with a metallic lustre; sometimes brownish, which sort is attracted by the magnet. They are often amorphous, and often also crystallized. Iron, in the state of a carburet, forms the *graphite* of Werner, (*plumbago.*) This mineral occurs in kidney-form lumps of various sizes. Its colour is a dark iron-grey, or brownish black; when cut, blueish-grey. It has a metallic lustre. Its texture is fine-grained. It is very brittle. The combination of iron with oxygen is very abundant. The common *magnetic iron stone*, or *load-stone*, belongs to this class: as does *specular iron ore*, and all the different ores called *hæmatites*, or *blood-stone.* Iron united to carbonic acid, exists in the *sparry iron ore.* Joined to arsenic acid it exists in the ores called *arseniate of iron*, and *arseniate of iron and copper.*

Properties of iron. — Iron is distinguished from every other metal by its magnetical properties. It is attracted by the magnet, and acquires, under various conditions, the property of attracting other iron. Pure iron is of a whitish grey, or rather blueish colour, very slightly livid; but when polished, it has a great deal of brilliancy. Its texture is either fibrous, fine-grained, or in dense plates. Its specific gravity varies from 7.6 to 7.8. It is the hardest and most elastic of all the metals. It is extremely ductile, and may therefore be drawn into wire as fine as a human hair; it is also more tenacious than any other metal, and yields with facility to pressure. It is extremely infusible, and when not in contact with the fuel, it cannot be melted by the heat which any furnace can excite; it is, however, softened by heat, still preserving its ductility; and when thus softened, different pieces may be united; this constitutes the valuable property of *welding.* It is very dilatable by heat. It is the only metal which takes fire by the collition of flint. Heated in contact with air it becomes oxidized. If intensely and briskly heated, it takes fire with scintillation, and becomes a black oxide. It combines with carbon, and forms what is called steel. It combines with phosphorus in a direct and an indirect manner, and unites with sulphur readily by fusion. It decomposes water in the cold slowly, but rapidly when ignited. It decomposes most of the metallic oxides. All acids act upon iron. Very concentrated sulphuric acid has little or no effect upon it, but when diluted it oxidizes it rapidly. The nitric acid oxidizes it with great vehemence. Muriate of ammonia is decomposed by it. Nitrate of potash detonates very vigorously with it. Iron is likewise dissolved by alkaline sulphurets. It is capable of combining with a number of metals. It does not unite with lead or bismuth, and very feebly with mercury. It denotates by percussion with the oxigenated muriates.

Method of obtaining iron. — The general process by which iron is extracted from its ores, is first to roast them by a strong heat, to expel the sulphur, carbonic acid, and other mineralizers which can be separated by heat. The remaining ore, being reduced to small pieces, is mixed with charcoal, or coke; and is then exposed to an intense heat, in a close furnace, excited by bellows; the oxigen then combines with the carbon, forming carbonic acid gas during the process, and the oxide is reduced to its metallic state. There are likewise some fluxes necessary in order to facilitate the separation of the melted metal. The matrix of the iron ore is generally either argillaceous or calcareous, or sometimes a portion of siliceous earth; but whichever of these earths is present, the addition of one or both of the others makes a proper flux. These are therefore added in due proportion, according to the nature of the ores; and this mixture, *in contact with the fuel*, is exposed to a heat sufficient to reduce the oxide to its metallic state.

The metal thus obtained, and called smelted, pig, or cast iron, is far from being pure, always retaining a considerable quantity of carbon and oxygen, as well as several heterogeneous ingredients. According as one or other of these predominates, the property of the metal differs. Where the oxygen is present in a large proportion, the colour of the iron is whitish grey, it is extremely brittle, and its fracture exhibits an appearance of crystallization; where the carbon exceeds, it is of a dark grey, inclining to blue, or black, and is less brittle. The former is the *white*, the latter the *black crude iron of commerce*. The *grey* is intermediate to both. In many of these states, the iron is much more fusible than when pure; hence it can be fused and cast into any form; and when suffered to cool slowly, it crystallizes in octahedra: it is also much more brittle, and cannot therefore be either flattened under the hammer, or by the laminating rollers.

To obtain the iron more pure, or to free it from the carbon with which it is combined in this state, it must be refined by subjecting it to the operations of melting and forging. By the former, in which the metal is kept in fusion for some time, and constantly kneaded and stirred, the carbon and oxygen it contains are partly combined, and the produced carbonic acid gas is expelled: the metal at length becomes viscid and stiff; it is then subjected to the action of a very large hammer, or to the more equal, but less forcible pressure of large rollers, by which the remaining oxide of iron, and other impurities, not consumed by the fusion, are pressed out. The iron is now no longer granular nor crystallized in its texture; it is fibrous, soft, ductile, malleable, and totally infusible. It is termed forged, wrought, or bar, iron, and is the metal in a purer state, though far from being absolutely pure.

The general medicinal virtues of iron, and the several preparations of it, are to constringe the fibres, to quicken the circulation, to promote the different secretions in the remoter parts, and at the same time to repress inordinate discharges into the intestinal tube. By the use of chalybeates, the pulse is very sensibly raised; the colour of the face, though before pale, changes to a florid red; the alvine, urinary, and cuticular excretions, are increased.

When given improperly, or to excess, iron produces head-ache, anxiety, heats the body, and often causes hæmorrhages, or even vomiting, pains in the stomach, spasms, and pains of the bowels.

Iron is given in most cases of debility and relaxation; in passive hæmorrhages; in dyspepsia, hysteria, and chlorosis; in most of the cachexiæ; and it has lately been recommended as a specific in cancer. Where either a preternatural discharge, or suppression of natural secretions, proceeds from a languor, or sluggishness of the fluids, and weakness of the solids, this metal, by increasing the motion of the former and the strength of the latter, will suppress the flux, or remove the suppression; but where the circulation is already too quick, the solids too tense and rigid, where there is any stricture, or spasmodic contraction of the vessels, iron, and all the preparations of it, will aggravate both diseases. Iron probably has no action on the body when taken into the stomach, unless it be oxidized. But during its oxidizement, hydrogen gas is evolved, and accordingly we find that fœtid eructations and black fæces are considered as proofs of the medicine having taken effect. It can only be exhibited internally in the state of filings, which may be given in doses from five to twenty grains. Iron wire is to be preferred for pharmaceutical preparations, both because it is the most convenient form, and because it is the purest iron.

The medicinal preparations of iron now in use are; —

1. Subcarbonas ferri. See *Ferri subcarbonas*.
2. Sulphas ferri. See *Ferri sulphas*.
3. Ferrum tartarizatum. See *Ferrum tartarizatum*.
4. Liquor ferri alkalini. See *Ferri alkalini liquor*.
5. Tinctura acetatis ferri. See *Tinctura ferri acetatis*.
6. Tinctura muriatis ferri. See *Tinctura ferri muriatis*.
7. Tinctura ferri ammoniati. See *Tinctura ferri ammoniati*.
8. Vinum ferri. See *Vinum ferri*.
9. Ferrum ammoniatum. See *Ferrum ammoniatum*.
10. Oxydum ferri rubrum. See *Oxydum ferri rubrum*.
11. Oxydum ferri nigrum. See *Oxydum ferri nigrum*.

IRRITABILITY. (*Irritabilitas*: from *irrito*, to provoke.) *Vis insita* of Haller. *Vis vitalis* of Goerter. Oscillation of Boerhaave. Tonic power of Stahl. Muscular power of Bell. Inherent power of Cullen. The contractility of muscular fibres, or a property *peculiar* to muscles, by which they contract upon the application of certain stimuli, without a consciousness of action. This power may be seen in the tremulous contraction of muscles when lacerated, or when entirely separated from the body in operations. Even when the body is dead to all appearance, and the nervous power is gone, this contractile power remains till the organization yields, and begins to be dissolved. It is by this inherent power that a cut muscle contracts, and leaves a gap, that a cut artery shrinks and grows stiff after death. This irritability of muscles is so far independent of nerves, and so little connected with feeling, which is the province of the nerves, that, upon stimulating any muscle by touching it with caustic, or irritating it with a sharp point, or driving the electric spark through it, or exciting with the metallic conductors, as those of silver, or zinc, the muscle instantly contracts, although the nerve of that muscle be tied; although the nerve be cut so as to separate the muscle entirely from all connection with the system; although the muscle be separated from the body; although the creature upon which the experiment is performed may have lost all sense of feeling, and have been long apparently dead. Thus a muscle, cut from the limb, trembles and palpitates a long time after; the heart, separated from the body, contracts when irritated; the bowels, when torn from the body, continue their peristaltic motion, so as to roll upon the table, ceasing to answer to stimuli only when they become stiff and cold; and too often, in the human body, the vis insita loses the exciting power of the nerves, and then palsy ensues; or, losing all governance of the nerves, the vis insita, acting without the regulating power, falls into partial or general convulsions. Even in vegetables, as in the sensitive plant, this contractile power lives. Thence comes the distinction between the irritability of muscles and the sensibility of nerves: for the *irritability* of muscles survives the animals, as when it is active after death: survives the life of the part, or the feelings of the whole system, as in universal palsy, where the vital motions continue entire and perfect, and where the muscles, though not obedient to the will, are subject to irregular and violent actions; and it survives the connection with the rest of the system, as when animals very tenacious of life, are cut into parts: but *sensibility*, the property of the nerves, gives the various modifications of sense, as vision, hearing, and the rest; gives also the general sense of pleasure or pain, and makes the system according to its various conditions, feel vigorous and healthy, or weary and low. And thus the eye feels and the skin feels: but their appointed stimuli produce no motions in these parts; they are sensible, but not irritable. The heart, the intestines, the urinary bladder, and all the muscles of voluntary motion, answer to stimuli with a quick and forcible contraction; and yet they hardly feel the stimuli by which these contractions are produced, or, at least, they do not convey that feeling to the brain. There is no consciousness of present stimulus in those parts which are called into action by the impulse of the nerves, and at the command of the will: so that muscular parts have all the irritability of the system, with but little feeling, and that little owing to the nerves which enter into their substance; while nerves have all the sensibility of the system, but no motion.

The discovery of this singular property belongs to our countryman Glisson; but Baron Haller must be considered as the first who clearly pointed out its existence, and proved it to be the cause of muscular motion.

The laws of irritability, according to Dr. Crichton, are, 1. After every action in an irritable part, a state of rest, or cessation from motion, must take place before the irritable part can be again incited to action. If, by an act of volition, we throw any of our muscles into action, that action can only be continued for a certain space of time; the muscle becomes relaxed, notwithstanding all our endeavours to the contrary, and remains a certain time in that relaxed state, before it can be again thrown into action. 2. Each irritable part has a certain portion or quantity of the principle of irritability which is natural to it, part of which it loses during action, or from the application of stimuli. 3. By a process wholly unknown to us, it regains this lost quantity, during its repose, or state of rest. In order to express the different quantities of irritability in any part, we say that it is either more or less redundant, or more or less defective. It becomes redundant in a part when the stimuli which are calculated to act on that part are withdrawn, or withheld for a certain length of time, because then no action can take place: while, on the other hand, the application of stimuli causes it to be exhausted, or to be deficient, not only by exciting action, but by some secret influence, the nature of which has not yet been detected; for it is a circumstance extremely deserving of attention, that an irritable part, or body, may be suddenly deprived of its irritability by powerful stimuli, and yet no apparent muscular or vascular action takes place at the time. A certain quantity of spirits, taken at once into the stomach, kills almost as instantaneously as lightning does: the same thing may be observed of some poisons, as opium, distilled laurel-water, the juice of the cerbera ahovai, &c. 4. Each irritable part has stimuli which are peculiar to it, and which are intended to support its natural action: thus, blood, which is the stimulus proper to the heart and arteries, if, by any accident, it gets into the stomach, produces sickness, or vomiting. If the gall, which is the natural stimulus to the ducts of the liver, the gall-bladder, and the intestines, is by any accident effused into the cavity of the peritoneum, it excites too great action of the vessels of that part, and induces inflammation. The urine does not irritate the tender fabric of the kidneys, ureters, or bladder, except in such a degree as to preserve their healthy action; but if it be effused into the cellular membrane, it brings on such a violent action of the vessels of these parts, as to produce gangrene. Such stimuli are called *habitual* stimuli of parts. 5. Each irritable part differs from the rest in regard to the quantity of irritability which it possesses. This law explains to us the reason of the great diversity which we observe in the action of various irritable parts; thus the muscles of voluntary motion can remain a long time in a state of action, and if it be continued as long as possible, another considerable portion of time is required before they regain the irritability they lost; but the heart and arteries have a more short and sudden action, and their state of rest is equally so. The circular muscles of the intestines have also a quick action and short rest. The urinary bladder does not fully regain the irritability it loses during its contraction for a considerable space of time; the vessels which separate and throw out the menstrual discharge, act, in general, for three or four days, and do not regain the irritability they lose for a lunar month. 6. All stimuli produce action in proportion to their irritating powers. As a person approaches his hand to the fire, the action of all the vessels in the skin is increased, and it glows with heat; if the hand be approached still nearer, the action is increased to such an unusual degree as to occasion redness and pain; and if it be continued too long, real inflammation takes place; but if this heat be continued, the part at last loses its irritability, and a sphacelus or gangrene ensues. 7. The action of every stimulus is in an inverse ratio to the frequency of its application. A small quantity of spirits taken into the stomach, increases the action of its muscular coat, and also of its various vessels, so that digestion is thereby facilitated. If the same quantity, however, be taken frequently, it loses its effect. In order to produce the same effect as at first, a larger quantity is necessary; and hence the origin of dram-drinking. 8. The more the irritability of a part is accumulated, the more that part is disposed to be acted upon. It is on this account that the activity of all animals, while in perfect health, is much livelier in the morning than at any other part of the day; for, during the night, the irritabilty of the whole frame, and especially that of the muscles destined for labour, viz. the muscles for voluntary action, is re-accumulated. The same law explains why digestion goes on more rapidly the first hour after food is swallowed than at any other time; and it also accounts for the great danger that accrues to a famished person upon first taking in food. 9. If the stimuli which keep up the action of any irritable body be withdrawn for too great a length of time, that process on which the formation of the principle depends is gradually diminished, and at last entirely destroyed. When the irritability of the system is too quickly exhausted by heat, as is the case in certain warm climates, the application of cold invigorates the frame because cold is a mere diminution of the overplus of that stimulus which was causing the rapid consumption of the principle. Under such or similar circumstances, therefore, cold is a tonic remedy; but if, in a climate naturally cold, a person were to go into a cold bath, and not soon return into a warmer atmosphere, it would destroy life just in the same manner as many poor people who have no comfortable dwellings are often destroyed from being too long exposed to the cold in winter. Upon the first application of cold the irritability is accumulated, and the vascular system therefore is exposed to great action; but, after a certain time, all action is so much diminished, that the process, whatever it be, on which the formation of the irritable principle depends, is entirely lost. For further information on this interesting subject, see Dr. Crichton on Mental Derangement.

IRRITATION. *Irritatio.* The action produced by any stimulus.

I'sca. A sort of fungous excrescence of the oak, or of the hazel, &c. The antients used it as the moderns used moxa.

Ischæ'mon. (From ισχω, to restrain, and αιμα, blood.) A name for any medicine which restrains or stops bleeding.

Ischæ'mum. A species of *Andropogon.*

I'SCHIAS. (Ισχιας: from ισχιον, the hip.) *Sciatica.* A rheumatic affection of the hip-joint. See *Rheumatismus.*

ISCHIATOCE'LE. (From ισχιον, the hip, and κηλη, a rupture.) *Ischiocele.* An intestinal rupture, through the sciatic ligaments.

Ischio-caverno'sus. See *Erector penis.*

Ischioce'le. See *Ischiatocele.*

I'SCHIUM. (From ισχις, the loin; so named because it is near the loin.) A bone of the pelvis of the fœtus, and a part of the os innominatum of the adult. See *Innominatum os.*

Ischnopho'nia. (From ισχνος, slender, and φωνη, the voice.) A shrillness of the voice; but more frequently an hesitation of speech, or a stammering; it is the *psellismus hæsitans,* of Cullen.

Ischure'tica. (From ισχουρια, a suppression of the urine.) Medicines which relieve a suppression of the urine.

ISCHU'RIA. (From ισχω, to restrain and ουρον, the urine.) A suppression of urine. A genus of disease in the class *locales,* and order *epischeses,* of Cullen. There are four species of ischuria:

1. *Ischuria renalis,* coming after a disease of the kidneys, with a troublesome sense of weight or pain in that part.

2. *Ischuria ureterica,* after a disease of the kidneys, with a sense of pain or uneasiness in the course of the ureters.

3. *Ischuria vesicalis,* marked by a frequent desire to make water, with a swelling of the hypogastrium, and pain at the neck of the bladder.

4. *Ischuria urethralis,* marked by a frequent desire to make water, with a swelling of the hypogastrium, and pain of some part of the urethra.

When there is a frequent desire of making water, attended with much difficulty in voiding it, the complaint is called a dysury, or strangury; and when there is a total suppression of urine, it is known by the name of an ischury. Both ischuria and dysuria are distinguished into acute, when arising in consequence of inflammation; and chronic, when proceeding from any other cause, such as calculus, &c.

The causes which give rise to these diseases, are an inflammation of the urethra, occasioned either by venereal sores or by a use of acrid injections, tumour or ulcer of the prostrate gland, inflammation of the bladder or kidneys, considerable enlargements of the hæmorrhoidal veins, a lodgement of indurated fæces in the rectum, spasm at the neck of the bladder, the absorption of cantharides applied externally, or taken internally, and excess in drinking either spirituous or vinous liquors; but particles of gravel sticking at the neck of the bladder, or lodging in the urethra, and thereby producing irritation, prove the most frequent cause. Gouty matter falling on the neck of the bladder, will sometimes occasion these complaints.

In dysury there is a frequent inclination to make water, attended with a smarting pain, heat, and difficulty in voiding it, together with a sense of fulness in the region of the bladder. The symptoms often vary, however, according to the cause which has given rise to it. If it proceeds from a calculus in the kidney, or ureter, besides the affections mentioned, it will be accompanied with nausea, vomiting, and acute pains in the loins and region of the ureter and kidney of the side affected. When a stone in the bladder, or gravel in the urethra, is the cause, an acute pain will be felt at the end of the penis, particularly on voiding the last drops of urine, and the stream of water will either be divided into two, or be discharged in a twisted manner, not unlike a cork-screw. If a scirrhus of the prostate gland has occasioned the suppression or difficulty of urine, a hard indolent tumour, unattended with any acute pain, may readily be felt in the perinæum, or by introducing the finger in ano.

Dysury is seldom attended with much danger, unless, by neglect, it should terminate in a total obstruction. Ischury may always be regarded as a dangerous complaint, when it continues for any length of time, from the great distension and often consequent inflammation which ensue. In those cases where neither a bougie nor a catheter can be introduced, the event, in all probability, will be fatal, as few patients will submit to the only other means of drawing off the urine before a considerable degree of inflammation and tendency to gangrene have taken place.

Isinglass. See *Ichthyocolla.*

Isla′ndicus mu′scus. See *Lichen islandicus.*

Iso′chronos. (From ισος, equal, and χρονος, time.) Preserving an equal distance of time between the beats; applied to the pulse.

Iso′crates. (From ισος, equal, and κεραννυμι, to mix.) Wine mixed with an equal quantity of water.

Iso′dromus. (From ισος, equal, and δρομος, a course.) The same as *Isochronos.*

Isopy′rum. (From ισος, equal, and πυρ, fire; so named from its flame-coloured flower.) The herb aquilegia.

Iso′tonus. (From ισος, equal, and τονος, extension.) Applied to fevers which are of equal strength during the whole of the paroxysm.

I′SSUE. *Fonticulus.* An artificial ulcer, intended as a remedy for certain morbid affections, by producing a discharge of purulent matter from different parts of the body.

I′sthmion. (From ισθμος, a narrow piece of land between two seas.) The narrow passage between the mouth and gullet: the fauces.

I′sthmus Vieussenii. The ridge surrounding the oval fossa, or remains of the foramen ovale, in the right auricle of the human heart.

Ithmoi′des. Falsely, for *Ethmoides.*

Itinera′rium. (From *iter*, a way.) The catheter; also a staff used in cutting for the stone; it is thus named by Hildanus.

I′va peca′nga. See *Smilax sarsaparilla.*

Ivy. See *Hedera helix.*

Ivy, ground. See *Glecoma hederacea.*

Ivy-gum. See *Hedera helix.*

I′xia. (From ιξος, glue.) A name of the carlina, from its viscous juice. Also a preternatural distension of the veins, from ιξομαι, to proceed from.

Ixine. See *Carlina gummifera.*

J.

JA'CEA. (*Quia prodest hominibus tristitia jacentibus;* because it resists sorrow; or from *ιαομαι*, to heal.) The herb pansey, or heart's-ease.

JACI'NTHUS. See *Hyacinthus.*

Jack-by-the-hedge. See *Erysimum alliaria.*

JACOBÆ'A. (Named because it was dedicated to St. James, or because it was directed to be gathered about the feast of that saint.) See *Senecio Jacobæa.*

Jalap. See *Convolvulus jalapa.*

JALA'PA. See *Convolvulus jalapa.*

JALA'PIUM. (From *Chalapa*, or *Xalapa*, in New Spain, whence it is brought.) See *Convolvulus jalapa.*

JALA'PPA A'LBA. See *Convolvulus mecoacan.*

Jamaica bark. See *Cinchona caribæa.*

Jamaica pepper. See *Myrtus Pimenta.*

JA'MBLICHI SA'LES. A preparation with sal-ammoniac, some aromatic ingredients, &c. so called from Jamblichus, the inventor of it.

JA'NITOR. (From *janua*, a gate.) The pylorus, so called from its being, as it were, the door or entrance of the intestines.

Japan earth. See *Acacia catechu.*

JAPO'NICA TE'RRA. See *Acacia catechu.*

JARGON. See *Zircon.*

JA'SMINUM. (*Jasminum*; from *jasmen*, Arab, or from *ιον*, a violet, and *οσμη*, odour, on account of the fine odour of the flowers.) 1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.*

2. The pharmacopœial name of the jessamine. The flowers of this beautiful plant, the *Jasminum officinale* of Linnæus, have a very fragrant smell, and a bitter taste. They afford, by distillation, an essential oil, which is much esteemed in Italy to rub paralytic limbs, and in the cure of rheumatic pains.

JA'SMINUM OFFICINA'LE. The systematic name of the jessamine-tree. See *Jasminum.*

JA'TROPHA. (Most probably from *ιατρος*, a physician: the physic-nut.) The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Monadelphia.*

JATROPHA CURCAS. The systematic name of a plant whose seeds resemble the castor-oil seeds. *Ricinus major. Ricinoides. Pineus purgans. Pinhones indici. Faba cathartica. Nux cathartica Americana. Nux Barbadensis.* An oblong black seed, the produce of the *Jatropha curcas; foliis cordatis angulatis* of Linnæus. It affords a quantity of oil, which is given, in many places, as the castor-oil is in this country, to which it is very nearly allied. The seeds of the *Jatropha multifida* are of an oval and triangular shape, of a pale brown colour, are called purging-nuts, and give out a similar oil.

JA'TROPHA MA'NIHOT. This is the plant affording the Cassada root. *Cassada. Cacavi. Cassave. Cassava. Pain de Madagascar. Ricinus minor. Maniot. Yucca. Maniibar. Aipi. Aipima coxera. Aipipoca. Janipha.* The leaves are boiled, and eaten as we do spinach. The root abounds with a milky juice, and every part, when raw, is a fatal poison. It is remarkable that the poisonous quality is destroyed by heat: hence the juice is boiled with meat, pepper, &c. into a wholesome soup, and what remains after expressing the juice, is formed into cakes or meal, the principal food of the inhabitants. This plant, which is a native of three quarters of the world, is one of the most advantageous gifts of Providence, entering into the composition of innumerable preparations of an economical nature.

Cassada roots yield a great quantity of starch, called tapioca, exported in little lumps by the Brazilians, and now well known to us as diet for sick and weakly persons.

JEBB, JOHN, was born at London in 1736. He was originally devoted to the church, and, after studying at Cambridge, entered into orders, and obtained a living in Norfolk in 1764. The year following he published, in conjunction with two friends, a selection from Newton's Principia, with notes, which was highly esteemed. He soon after returned to Cambridge, and engaged warmly as an advocate for a reform in church and state, as well as in the discipline of that university. At length in 1775, he resigned all his offices in the church, the established doctrines of which he did not approve; and determined upon entering into the medical profession. He soon qualified himself for this, obtained a diploma from St. Andrews, and was admitted a licentiate of the London College of Physicians; and in the same year, 1778, he was elected a fellow of the Royal Society. In 1782 he published "Select Cases of Paralysis of the Lower Extremities;" which tend to support the practice of Mr. Pott, of applying caustics near the spine. To this work is added, an interesting description of a very rare disease, catalepsy. The warmth of his political sentiments, however, obstructed his professional career; and the various fatigues, and anxieties, to which he exposed himself, in order to further his benevolent designs, exhausted his constitution so much, that he sunk a premature victim in 1786.

Jecora'ria. (From *jecur*, the liver; so named from its supposed efficacy in diseases of the liver.) See *Marchantia polymorpha.* Also a name given to a vein in the right hand, because it was usually opened in diseases of the liver.

Jecora'ria ve'na. The hepatic vein.

Je'cur. (*-cinoris*, neut.) The liver.

Je'cur uteri'num. The *Placenta* is, by some, thus called, from the supposed similitude of its office with that of the liver.

JEJU'NUM. (From *jejunus*, empty.) *Jejunum intestinum.* The second portion of the small intestines, so called because it is mostly found empty. See *Intestines.*

JELLY. *Gelatine.* Modern chemists have given this name to the mucilaginous substance, very soluble in water, and not at all in spirits of wine, that is obtained from all the soft and white parts of animals, such as the membranes, tendons, aponeuroses, cartilages, ligaments, and skin, by boiling them in water. If the decoction of these be sufficiently evaporated, it affords a dry, brittle, transparent substance, commonly known by the name of glue, which is impure Gelatine.

Jerusalem cowslips. See *Pulmonaria officinalis.*

Jerusalem oak. See *Chenopodium botrys.*

Jerusalem sage. See *Pulmonaria officinalis.*

Jessamine. See *Jasminum.*

Jesuita'nus co'rtex. (*Jesuitanus*; from *jesuita*, a jesuit.) A name of the Peruvian bark, because it was first introduced into Europe by Father de Lugo, a jesuit. See *Cinchona.*

Jesui'ticus co'rtex. See *Cinchona.*

Jesuit's bark. See *Cinchona.*

Jet. A black bitumen, hard and compact, like certain stones, found in great abundance in various parts of France, Sweden, Germany, and Ireland. It is brilliant and vitreous in its fracture, and capable of taking a good polish by friction, it attracts light substances, and appears to be electric, like amber; hence it has been called *black amber*; it has no smell, but when heated it acquires one like bitumen judaicum.

Jew's pitch. See *Bitumen judaicum.*

John's wort. See *Hypericum.*

Judicato'rius. (From *judico*, to discern.) An obsolete term applied to a synocha of four days, because its termination may certainly be foreseen.

JUGA'LE OS. (*Jugalis*; from *jugum*, a yoke; from its resemblance, or because it is articulated to the bone of the upper jaw, like a yoke.) *Os malæ. Os zygomaticum.* The ossa malarum are the prominent square bones which form the upper part of the cheeks. They are situated close under the eyes, and make part of the orbits. Each of these bones has three surfaces to be considered. One of these is exterior and somewhat convex. The second is superior and concave, serving to form the lower and lateral parts of the orbit. The third, which is posterior, is very unequal and concave, for the lodgment of the lower part of the temporal muscle. Each of these bones may be described as having four processes, formed by their four angles. Two of these may be called *orbitar* processes. The superior one is connected with the orbitar process of the os frontis; and the inferior one with the malar process of the maxillary bone. The third is connected with the temporal process of the sphenoid bone; and the fourth forms a bony arch, by its connection with the zygomatic process of the temporal bone. In infants, these bones are entire and completely ossified.

JU'GLANS. (*Quasi Jovis glans*, the royal fruit, from its magnitude.) 1. The name of a genus of plants in the Linnæan system. Class, *Monœcia.* Order, *Polyandria.* The walnut-tree.

2. The pharmacopœial name of the walnut. See *Juglans regia.*

Ju'glans re'gia. The systematic name of the walnut-tree. The tree which bears the walnut is the *Juglans; foliolis ovalibus glabris subserratis subæqualibus*, of Linnæus. It is a native of Persia, but cultivated in this country. The unripe fruit, which has an astringent bitterish taste, and has been long employed as a pickle, is the part which was directed for medicinal use by the London College, on account of its anthelmintic virtues. An extract of the green fruit is the most convenient preparation, as it may be kept for a sufficient length of time, and made agreeable to the stomach of the patient, by mixing it with cinnamon water.

The putamen, or green rind of the walnut, has been celebrated as a powerful antivenereal remedy, for more than a century and a half; and Petrus Borellus has given directions for a decoction not unlike that which is commonly called the Lisbon diet-drink, in which the walnut, with its green bark, forms a principal ingredient. Ramazzini, whose works were published early in the present century, has likewise informed us, that in his time the green rind of the walnut was esteemed a good anti-venereal remedy in England. This part of the walnut has been much used in decoctions, during the last fifty years, both in the green and dried state; it has been greatly recommended by writers on the continent, as well as by those of our own country; and is, without doubt, a very useful addition to the decoction of the woods. Mr. Pearson has employed it during many years, in those cases where pains in the limbs and indurations of the membranes have remained, after the venereal disease has been cured by mercury; and he informs us, that he has seldom directed it without manifest advantage.

Brambilla and Girtanner also contend for the anti-venereal virtues of the green bark of the walnut; but the result of Mr. P.'s experience will not permit him to add his testimony to theirs. I have given it, says he, in as large doses as the stomach could retain, and for as long a time as the strength of the patients, and the nature of their complaints, would permit; but I have uniformly observed, that if they who take it be not previously cured of *lues venerea*, the peculiar symptoms will appear, and proceed in their usual course, in defiance of the powers of this medicine. The *Decoctum Lusitanicum* may be given with great advantage in many of those cutaneous diseases which are attended with aridity of the skin; and I have had some opportunities of observing, that when the putamen of the walnut has been omitted, either intentionally or by accident, the same good effects have not followed the taking of the decoction, as when it contained this ingredient. See *Juglans*.

JUGULAR VEINS. (*Venæ jugulares;* from *jugulum*, the throat.) These veins run from the head down the sides of the neck, and are divided, from their situation, into external and internal. The *external*, or *superficial jugular vein*, receives the blood from the frontal, angular, temporal, auricular, sublingual, or ranine, and occipital veins. The *internal*, or *deep-seated jugular vein*, receives the blood from the lateral sinusses of the dura mater, the laryngeal and pharyngeal veins. Both jugulars unite, and form, with the subclavian vein, the superior vena cava, which terminates in the superior part of the right auricle of the heart.

Ju′gulum. (From *jugum*, a yoke; because the yoke is fastened to this part.) The throat, or anterior part of the neck.

Ju′jubes. See *Jujubæ*.

Ju′jubæ. (*Arab.*) Jujubes. A half-dried fruit of the plum kind, about the size and shape of an olive, the produce of the *Rhamnus zizyphus* of Linnæus. Jujubes, when in perfection, have an agreeable sweet taste, and in the southern parts of Europe, where they are common, they make an article of food in their recent state, and of medicine when half dried.

July flowers. See *Dianthus Caryophyllus*.

JUNCKER, Gottlob John, was born in 1680 at Londorff in Hesse. After the proper studies, he graduated at Halle in 1718; and became afterwards a distinguished professor there, as well as physician to the public hospital. His works, which are chiefly compilations, have been much esteemed, and are still occasionally referred to; especially as giving a compendious view of the doctrines of Stahl, which he espoused and taught. He has given a "Conspectus" of medicine, of surgery, of chemistry, and of several other departments of professional knowledge; also many academical theses on medical, chirurgical, and philosophical subjects. He died in 1759.

Ju′ncus odora′tus. See *Andropogon Schænanthus*.

Juniper. See *Juniperus*.

Juniper gum. See *Juniperus*.

JUNI′PERUS. (*Juniperus;* from *juvenis*, young, and *pario*, to bring forth; so called because it produces its young berries while the old ones are ripening.)

1. The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Monadelphia*.

2. The pharmacopœial name of the common juniper. See *Juniperus communis*.

Juni′perus commu′nis. The systematic name of the juniper-tree. *Juniperus; foliis ternis patentibus mucronatis, baccis longioribus*, of Linnæus. Both the tops and berries of this indigenous plant are directed in our pharmacopœias, but the latter are usually preferred, and are brought chiefly from Holland and Italy. Of their efficacy as a stomachic, carminative, diaphoretic, and diuretic, there are several relations by physicians of great authority: and medical writers have also spoken of the utility of the juniper in nephritic cases, uterine obstructions, scorbutic affections, and some cutaneous diseases. Our pharmacopœias direct the essential oil, and a spirituous distillation of the berries, to be kept in the shops. From this tree is also obtained a concrete resin, which has been called sandarach, or gum juniper. It exudes in white tears, more transparent than mastich. It is almost totally soluble in alkohol, with which it forms a white varnish that dries speedily. Reduced to powder it is called *pounce*, which prevents ink from sinking into paper from which the exterior coating of size has been scraped away.

Juni′perus ly′cia. The systematic name of the plant which affords the true frankincence. *Olibanum*. *Thus*. Frankincense. This drug has received different appellations, according to its different appearances; the single tears are called simply *olibanum*, or *thus;* when two are joined together, *thus masculum;* and when two are very large, *thus femininum;* if several adhere to the bark, *thus corticosum;* the fine powder which rubs off from the tears, *mica thuris;* and the coarser, *manna thuris*. The gum-resin that is so called, is the juice of the *Juniperus lycia: foliis ternis undique imbricatis ovatis obtusis*, and is brought from Turkey and the East Indies; but that which comes from India is less esteemed. It is said to ooze spontaneously from the bark of the tree, appearing in drops, or tears, of a pale yellowish, and sometimes of a reddish colour. Olibanum has a moderately strong and not very agreeable smell, and a bitterish, somewhat pungent taste: in chewing, it sticks to the teeth, becomes white, and renders the saliva milky. Laid on a red-hot iron, it readily catches flame, and burns with a strong diffusive and not unpleasant smell. On trituration with water, the greatest part of it dissolves into a milky liquor, which, on standing, deposits a portion of resinous matter. The gummy and resinous parts are nearly in equal proportions; and though rectified spirit dissolves less of the olibanum than water, it extracts nearly all its active matter. In antient times, olibanum seems to have been in great repute in affections of the head and breast, coughs, hæmoptysis, and in various fluxes, both uterine and intestinal; it was also much employed externally. Recourse is now seldom had to this medicine, which is superseded by myrrh, and other articles of the resinous kind. It is, however, esteemed by many as an adstringent, and though not in general use, is considered as a valuable medicine in fluor albus, and debilities of the stomach and intestines: applied externally in the form of plaster, it is said to be corroborant, &c. and with this intention it forms the basis of the *emplastrum thuris*.

Juni'perus sabi'na. The systematic name of the savine-tree. *Sabina. Savina. Sabina sterilis. Brathu.* Common or barren Savin. *Juniperus sabina; foliis oppositis erectis decurrentibus, oppositionibus pyxidatis*, of Linnæus. Savin is a native of the south of Europe and the Levant; it has long been cultivated in our gardens, and from producing male and female flowers on separate plants it was formerly distinguished into the barren and berry-bearing savin. The leaves and tops of this plant have a moderately strong smell of the disagreeable kind, and a hot, bitterish, acrid taste. They give out great part of their active matter to watery liquors, and the whole to rectified spirit. Distilled with water they yield a large quantity of essential oil. Decoctions of the leaves, freed from the volatile principle by inspissation to the consistence of an extract, retain a considerable share of their pungency and warmth along with their bitterness, and have some degree of smell, but not resembling that of the plant itself. On inspissating the spirituous tincture, there remains an extract consisting of two distinct substances, of which one is yellow, unctuous, or oily, bitterish, and very pungent; the other black, resinous, less pungent, and sub-astringent. Savin is a powerful and active medicine, and has been long reputed the most efficacious in the materia medica, for producing a determination to the uterus, and thereby proving emmenagogue; it heats and stimulates the whole system very considerably, and is said to promote the fluid secretions. The power which this plant possesses (observes Dr. Woodville) in opening uterine obstructions, is considered to be so great, that we are told it has been frequently employed, and with too much success, for purposes the most infamous and unnatural. It seems probable, however, that its effects in this way have been somewhat over-rated, as it is found very frequently, to fail as an emmenagogue, though this, in some measure, may be ascribed to the smallness of the dose in which it has been usually prescribed by physicians; for Dr. Cullen observes, "that savin is a very acrid and heating substance, and I have been often, on account of these qualities, prevented from employing it in the quantity necessary to render it emmenagogue. I must own, however, that it shows a more powerful determination to the uterus than any other plant I have employed; but I have been frequently disappointed in this, and its heating qualities always require a great deal of caution." Dr. Home appears to have had very great success with this medicine, for in five cases of amenorrhæa, which occurred at the Royal Infirmary at Edinburgh, four were cured by the sabina, which he gave in powder from a scruple to a drachm twice a day. He says it is well suited to the debile, but improper in plethoric habits, and therefore orders repeated bleedings before its exhibition. Country people give the juice from the leaves and young tops of savin mixed with milk to their children in order to destroy the worms; it generally operates by stool, and brings them away with it. The leaves cut small, and given to horses, mixed with their corn, destroy the bots. Externally savin is recommended as an escharotic to foul ulcers, syphilitic warts, &c. A strong decoction of the plant in lard and wax forms an useful ointment to keep up a constant discharge from blisters, &c. See *Ceratum Sabinæ.*

Ju'piter. The antient chemical name of tin, because supposed under the government of that planet.

JURIN, James, was, during several years, an active member and Secretary of the Royal Society, and at his death in 1750, President of the College of Physicians. He distinguished himself by a series of seventeen dissertations, printed in the Philosophical Transactions, and afterwards as a separate work, in which mathematical science was applied with considerable acuteness to physiological subjects. These papers, however, involved him in several philosophical controversies concerning the force of the heart, &c. He was a warm advocate for the practice of inoculation, which he proved greatly to lessen the violence of the small-pox: but he did not anticipate that it would increase the mortality upon the whole, by keeping up the infection, while many retained their prejudices against adopting it.

Juva'ntia. (From *juvo*, to assist.) Medicines, or assistances of any kind, which relieve a distemper.

Juxtangi'na. (From *juxta*, near, and *angina*, a quinsy.) A disease resembling a quinsy.

K.

KÆMPFER, Engelbert, was born in 1651 at Lippe in Westphalia. He was educated in Sweden, and being eager to travel, accompanied the Swedish Ambassador, Fabricius, to Persia as Secretary: on whose departure from Ispahan after two years he obtained the appointment of chief surgeon to the Dutch East India Company; and was thus enabled to penetrate as far as Siam and Japan, and cleared up the Geography of these countries, which was very imperfectly known before. On his return to Europe in 1694 he graduated at Leyden, and settled in his own country; he was afterwards appointed physician to his sovereign, and continued engaged in practice, and in composing several works, till his death in 1716. In his Inaugural Dissertation, among other subjects relating to medicine, he notices a method of curing colic amongst the Japanese by puncture with a needle. But his great work entitled "Amænitates Exoticæ," is more especially esteemed for its botanical information, and authentic details, relating to the history and manners of Persia, &c. His History of Japan, of which there is an English translation in folio, is highly valued for its accuracy and fidelity.

Kæmpfe'ria Gala'nga. The plant which affords the greater galangal root.

Kæmpfe'ria rotu'nda. The systematic name of the plant which affords the officinal zedoary. *Zedoaria. Kæmpferia, foliis lanceolatis petiolatis*, of Linnæus. The roots of this plant are brought to us in long pieces about the thickness of the little finger, two or three inches in length, bent, rough, and angular; or in roundish pieces about an inch in diameter, of an ash colour on the outside, and white within. They have an agreeable camphoraceous smell, and a bitterish aromatic taste. Though formerly much esteemed against rheumatic affections, they are at present thought to possess very little medicinal powers, although they had a place in the confectio aromatica of the London Pharmacopœia.

Ka'jeput o'leum. See *Melaleuca*.

Ka'li. (Arab.) The *Kali* of the pharmacopœias is the vegetable alkali or potash. See *Potassa*.

Ka'li aceta'tum. See *Potassæ acetas*.

Ka'li aera'tum. See *Potassæ carbonas*.

Ka'li arsenica'tum. A preparation of arsenic, composed of the vegetable alkali and the acid of arsenic.

Ka'li citra'tum. *Alkali vegetabile, succo citri saturatum*. This neutral saline liquor, a citrate of potash, is made by saturating prepared kali with lemon juice. It is the base of the saline draught; it possesses nervine and sudorific properties; and is exhibited in rheumatism, catarrh, and most febrile diseases.

Ka'li præpara'tum. See *Potassæ subcarbonas*.

Ka'li pu'rum. See *Potassa fusa*.

Ka'li sulphura'tum. See *Sulphuretum potassæ*.

Ka'li tartariza'tum. See *Potassæ tartras*.

Ka'li vitriola'tum. See *Potassæ sulphas*.

KEILL, James, was born in Scotland, 1673. After going through the proper studies abroad, and especially attending to anatomy, he was enabled to lecture on that subject with great reputation in both the English universities, and received an honorary degree at Cambridge. During this period he published a Compendium of Anatomy, chiefly from Cowper. In 1703 he settled in practice at Northampton; and three years after sent to the Royal Society an account of the dissection of a man, reputed to have been 130 years of age; which agreed very much with what Harvey found in old Parr. He was well skilled in mathematics, which he applied to the explanation of the laws of the animal economy. In 1708 he published "An Account of Animal Secretion, the Quantity of Blood in the Human Body, and Muscular Motion." To which, in a second edition, he added an Essay on the Force of the Heart. This engaged him in a controversy with Dr. Jurin, which was carried on in the Philosophical Transactions (Dr. Keill being then a member of the Royal Society) till the period of his premature death in 1719, occasioned by a cancer in the mouth, to which he had applied the cautery, but without any relief.

Kei′ri. See *Cheiranthus*.

KELP. The impure mineral alkali which is obtained in this country by burning marine plants.

Kerato pharyngæ′us. (From κερας, a horn, and φαρυγξ, the pharynx.) A muscle so named from its shape, and insertion in the pharynx.

Ke′rmes. (*Chermah*, Arab.) *Granum tinctorium*. *Coccus baphica*. Round reddish grains, about the size of peas, found in Spain, Italy, and the south of France, adhering to the branches of the scarlet oak. They are the nidus of a minute red animalcule, called *Coccus quercus ilicis*, of Linnæus. The *confectio alkermes*, now obsolete, was prepared with these, which possess corroborant and adstringent virtues.

Ke′rmes minera′lis. A preparation of antimony, so termed from its resemblance in colour to the insect of that name. It is now disused in medicine, and gives place to the other preparations of antimony. See *Hydrosulphuretum stibii rubrum*.

Kernel wort. See *Scrophularia nodosa*.

Ke′rva. (*Kervah*, Arab.) The *ricinus*.

KETCHUP. The prepared liquor of the mushroom.

KEYSER'S PILLS. A once celebrated mercurial medicine, the method of preparing which was purchased by the French government, and has since been published by M. Richard. The hydrargyrus acetatus is considered as an adequate substitute for the more elaborate form of Keyser. M. Richard concludes his account of Keyser's pills with observing, that he considers it to be, without exception, the most effectual remedy for the venereal disease hitherto discovered. But further trials of this remedy do not justify the sanguine accounts of its properties; though it may sometimes succeed when some of the other mercurial preparations have failed.

Kibes. A name for chilblains.

KIDNEY. (*Ren*, *-nis*. m.) An abdominal viscus, shaped like a kidney-bean, that secretes the urine. There are two kidneys. One is situated in each lumbar region, near the first lumbar vertebra, behind the peritoneum. This organ is composed of three substances; a cortical, which is external, and very vascular; a tubulous which consists of small tubes, and a papillous substance, which is the innermost. The kidneys are generally surrounded with more or less adipose membrane, and they have also a proper membrane, *membrana propria*, which is closely accreted to the cortical substance. The renal arteries, called also emulgents, proceed from the aorta. The veins evacuate their blood into the ascending cava. The absorbents accompany the blood-vessels, and terminate in the thoracic duct. The nerves of the kidneys are branches of the eighth pair and great intercostal. The excretory duct of this viscus is called the *ureter*. At the middle of the kidney, where the blood-vessels enter it, is a large membranous bag, called the pelvis, which diminishes like a funnel, and forms a long canal, the ureter, that conveys the urine from the kidney to the bladder, which it perforates obliquely.

Kikekunemalo. A pure resin, very similar to copal, but of a more beautiful whiteness and transparency. It is brought from America, where it is said to be used medicinally, in the cure of hysteria, tetanus, &c. It forms the most beautiful of all varnishes.

Ki′ki. (*Kike*, Arabian.) See *Ricinus*.

Ki′na ki′na. See *Cinchona*.

Ki′nic a′cid. This name has been given by Vauquelin to a peculiar acid, obtained from Cinchona.

Kinki′na. See *Cinchona*.

KINO. (Indian.) *Gummi gambiense*. *Gummi rubrum adstringens gambiense*. The tree from which this resin is obtained, though not botanically ascertained, is known to grow on the banks of the river Gambia, in Africa. On wounding its bark, the fluid kino immediately issues drop by drop, and, by the heat of the sun, is formed into hard masses. It is in appearance very like the resin called *Sanguis draconis*; much redder, more firm, resinous, and adstringent than catechu. It is now in common use, and is one of the most efficacious vegetable adstringents, or styptics, in the materia medica. Its dose is from twenty to thirty grains.

Knee-holly. See *Ruscus*.

Knee-pan. See *Patella*.

Kolto. (Polonese.) The plica polonica, or plaited hair.

Kyna′nche. See *Cynanche*.

L.

LA′BDANUM. See *Cistus creticus*.

La′bia lepori′na. (*Leporina*; from *lepus*, a hare, resembling a hare.) The hare-lip.

LABORATO′RIUM. (From *laboro*, to labour.) A place properly fitted up for the performance of chemical operations.

LA′BYRINTH. That part of the internal ear behind the cavity of the tympanum; it is constituted by the cochlea, vestibulum, and semicircular canals.

LAC. (*Lac*, *-tis*, n.)

1. Milk. See *Milk*.

2. The name of a vegetable substance. See *Lacca*.

Lac ammoni′aci. See *Mistura ammoniaci*.

Lac amy′gdalæ. A very pleasant, cooling, demulcent drink, calculated to alleviate ardor, urinæ, and strangury. It forms a pleasant ptisan in coughs, hoarsenesses, and catarrhs. See *Mistura amygdalarum*.

Lac assafœ′tidæ. See *Mistura assafœtidæ*.

Lac sulphuris. See *Sulphur præcipitatum*.

La′cca. (From *lakah*, Arab.) *Gummi Laccæ*. Stick-lac. Gum-lac. Seed-lac. Shell-lac. The improper name of gum-lac is given to a concrete brittle substance, of a dark red colour, brought from the East Indies, incrustated on the twigs of the *Croton lacciferum; foliis ovatis tomentosis serrulatis petiolatis, calycibus tomentosis*, of Linnæus, where it is deposited by a small insect, at present not scientifically known. It is found in very great quantities on the uncultivated mountains on both sides the Ganges; and is of great use to the natives in various works of art, as varnish, painting, dying, &c. When the resinous matter is broken off the wood into small pieces or grains, it is termed *seed-lac*, and when melted and formed into flat plates, *shell-lac*. This substance is chiefly employed for making sealing-wax. A tincture of it is recommended as an antiscorbutic to wash the gums.

La′chryma abie′gna. See *Terebinthina argentoratensis*.

LA′CHRYMÆ. The tears. A limpid fluid secreted by the lachrymal gland, and flowing on the surface of the eye.

LACHRYMAL BONE. See *Unguis os*.

LACHRYMAL DUCTS. *Ductus lachrymales*. The excretory ducts of the lachrymal gland, which open upon the internal surface of the upper eyelid.

LACHRYMAL GLAND. *Glandula lachrymalis*. A glomerate gland, situated above the external angle of the orbit, in a peculiar depression of the frontal bone. It secretes the tears, and conveys them to the eye by its excretory ducts, which are six or eight in number.

LACHRYMAL NERVE. The fifth pair of nerves from the head is divided into several branches, the first of which is called the orbitary branch; this is divided into three more, the third of which is called the *lachrymal branch*; it goes off chiefly to the lachrymal gland.

Laco′nicum. (Because they were much used by the people of Laconia.) A stove or sweating-room.

LACTATION. (From *lacteo*, to suckle.) The giving suck.

LACTATES. Salts formed by the union of the acid of sour whey, or lactic acid, with different bases; thus lactate of potash, &c.

LACTEALS. *Vasa lactea*. The absorbents of the mysentery, which originate in the small intestines, and convey the chyle from thence to the thoracic duct. They are very tender and transparent vessels, possessed of an infinite number of valves, which, when distended with chyle, a milky or lacteal fluid, give them a knotty appearance. They arise from the internal surface of the villous coat of the small intestines, perforate the other coats, and form a kind of net-work, whilst the greater number unite one with another between the muscular and external coats. From thence they proceed between the laminæ of the mesentery to the conglobate glands. In their course they constitute the greater part of the gland through which they pass, being distributed through them several times, and curled in various directions. The lacteals having passed these glands, go to others, and at length seek those nearest the mesentery. From these glands, which are only four or five, or perhaps more, the lacteals pass out and ascend with the mesenteric artery, and unite with the lymphatics of the lower extremities, and those of the abdominal viscera, and then form a common trunk, the *thoracic duct*, which, in some subjects, is dilated at its origin, forming the *receptaculum chyli*. See *Nutrition*.

LACTIC ACID. (From *lac*, milk.) The acid of sour milk.

La′ctica. The Arabian name for that species of fever which the Greeks call *Typhos*, or *Typhodes*.

Lacti′fuga. (From *lac*, milk, and *fugo*, to drive away.) Medicines which dispel milk.

LACTU′CA. (From *lac*, milk; named from the milky juice which exudes upon its being wounded.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*. The lettuce.

2. The pharmacopœial name of the garden-lettuce, the *Lactuca sativa* cultivated.

Lactu′ca grave′olens. See *Lactuca virosa*.

Lactu′ca sati′va. The systematic name of the lettuce. *Lactuca sativa*. It is esteemed as an wholesome aperient bitter anodyne, easy of digestion, but affording no nutriment. Lettuces appear to agree better with hot, bilious, melancholic temperaments, than the phlegmatic. The seeds possess a quantity of oily substance, which, triturated with water, forms an emulsion esteemed by some in ardor urinæ, and some diseases of the urinary passages. Lettuce was famous for the cure of the Emperor Augustus, and formed the opiate of Galen, in his old age; a proof that, in the warmer climates, it must acquire an exaltation of its virtues above what is met with in this country.

La′ctuca scari′ola. *Lactuca sylvestris*. *Scariola*. The *Lactuca scariola* of Linnæus, possesses a stronger degree of bitterness than the *Lactuca sativa*, and is said to be more aperient and laxative. It is nearly similar, in virtue as in taste, to endive unblanched.

La′ctuca sylve′stris. See *Lactuca scariola*.

La′ctuca viro′sa. The systematic name of the opium-scented lettuce. *Lactuca graveolens*. Strong-scented lettuce. *Lactuca virosa; foliis horizontalibus carino aculeatis dentatis*, of Linnæus. A common plant in our hedges and ditches. It has a strong ungrateful smell, resembling that of opium, and a bitterish acrid taste: it abounds with a milky juice, in which its sensible qualities seem to reside, and which appears to have been noticed by Dioscorides, who describes the odour and taste of the juice as nearly agreeing with that of the white poppy. Its effects are also said according to Haller, to be powerfully narcotic. Dr. Collin, at Vienna, first brought the lactuca virosa into medical repute, and its character has lately induced the College of Physicians at Edinburgh to insert it in the catalogue of the materia medica. More than twenty-four cases of dropsy are said, by Collin, to have been successfully treated by employing an extract prepared from the expressed juice of this plant, which is stated not only to be powerfully diuretic, but, by attenuating the viscid humours, to promote all the secretions, and to remove visceral obstructions. In the more simple cases, proceeding from debility, the extract, in doses of eighteen to thirty grains a day, proved sufficient to accomplish a cure; but when the disease was inveterate, and accompanied with visceral obstructions, the quantity of extract was increased to three drachms; nor did larger doses, though they excited nausea, ever produce any other bad effect; and the patients continued so strong under the use of this remedy, that it was seldom necessary to employ any tonic medicines. Though Dr. Collin began his experiments with the lactuca at the Pazman hospital, at the time he was trying the arnica, 1771, yet very few physicians, even at Vienna, have since adopted the use of this plant. Plenciz, indeed, has published a solitary instance of its efficacy, while Quarin informs us that he never experienced any good effect from its use; alleging, that those who were desirous of supporting its character, mixed it with a quantity of extractum scillæ. Under these circumstances we shall only say, that the recommendation of this medicine by Dr. Collin, will be scarcely thought sufficient to establish its use in England.

Lactuce′lla. (Diminutive of *lactuca*, the lettuce; no named from its milky juice.) The sow-thistle.

Lactuci′mina. (From *lacteo*, to suckle; so called because they happen chiefly to children while at the breast.) Aphthæ, or little ulcers, or crusty scabs, on the skin.

Lactu′men. (From *lac*, milk; so named because it is covered with a white crust.) The achor, or scald-head; also a little crusty scab on the skin, affecting chiefly children at the breast.

LACU′NÆ. (*Lacuna*; from *lacus*, a channel.) The mouths or openings of the excretory ducts of muciparous glands in the urethra, and other parts.

LA′DANUM. (From *ladon*, Arab.) See *Cistus creticus*.

Ladies bedstraw. See *Galium*.

Ladies mantle. See *Alchemilla*.

Ladies smock. See *Cardamine*.

Lætifica′ntia. (From *lætifico*, to make glad.) This term hath been applied to many compositions under the intention of cordials; but both the medicines and distinction are now quite disused.

La′garos. (Λαγαρος, lax; so named from its comparative laxity.) The right ventricle of the heart.

LAGOPHTHA′LMIA. (From λαγωος, a hare, and οφθαλμος, an eye; because it is believed that hares sleep with their eyes open.) *Lagophthalmos*. The hare's eye. A disease in which the eye cannot be shut. The following complaints may arise from it: a constant weeping of the organ, in consequence of the interruption of the alternate closure and opening of the eye-lids, which motions so materially contribute to propelling the tears into the nose; blindness in a strong light, in consequence of the inability to moderate the rays which fall on the eye; on the same account, the sight becomes gradually very much weakened; incapacity to sleep where there is any light; irritation, pain, and redness of the eye, from this organ being exposed to the extraneous substances in the atmosphere, without the eye-lids having the power of washing them away in the natural manner.

An enlargement or protrusion of the whole eye, or a staphyloma, may obviously produce lagophthalmos. But affections of the upper eye-lids are the common causes. Heister says he has seen the complaint originate from a disease of the lower one. Now and then lagophthalmos depends on paralysis of the orbicularis muscle. A cicatrix, after a wound, ulcer, or burn, is the most frequent cause.

Lagopo'dium. (From *λαγωος*, a hare, and *πους*, a foot; so called because it has narrow hairy leaves, like the foot of a hare.) The herb hare's-foot trefoil.

Lago'stoma. (From *λαγωος*, a hare, and *ϛομα*, the mouth; so called because the upper lip is divided in the middle like that of a hare. The hare-lip.

Lakeweed. See *Polygonum hydropiper.*

La'mac. Gum-arabic.

Lambdaci'smus. A defect in speech, which consists in an inability to pronounce certain consonants; or that stammering or difficulty of speech, called *Psellismus Lallans*; that is, when the letter L is pronounced too liquid, and often in the place of R.

LAMBDOIDAL SUTURE. *Sutura Lambdoidalis*; from Λ, and *ειδος*, resemblance; because it is shaped like the letter Λ.) Occipital suture. The suture that unites the occipital bone to the two parietal bones.

Lambiti'vum. (From *lambo*, to lick up.) A linctus or medicine to be licked up.

Lame'lla. (Dim. of *lamina*, a plate of metal.) The thin plates, or gills of a mushroom.

LA'MINA. (From *ελαω*, to beat off.) A bone, or membrane, or any substance resembling a thin plate of metal. The lap of the ear.

LA'MIUM. (From *Lamium*, a mountain of Ionia, where it grew, or from *lama*, a ditch, because it usually grows about ditches and neglected places.) The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*. The nettle.

La'mium a'lbum. *Urtica mortua*. *Archangelica*. Dead nettle. White archangel nettle. Uterine hæmorrhages and fluor albus are said to be relieved by infusions of this plant, from whose sensible qualities very little benefit can be expected.

La'mpsana. See *Lapsana*.

LANCE'TTA. (Dim. of *lancea*, a spear.) A lancet. An instrument used in phlebotomy.

LANCISI, John Maria, was born at Rome in 1654. He was intended for the church, but a taste for natural history led him to the study of medicine, which he pursued with great ardour, and took his degree at the age of 18. After some minor appointments, which enabled him to display his talents and acquirements, he was appointed professor of anatomy in 1684; and continued his duties for 13 years with great reputation. He was made physician to three succeeding popes, and attained the age of 65. He had great knowledge of mankind, with very engaging manners; and his zeal for the advancement of medicine was extreme and unceasing. He collected a library of above 20,000 volumes, which he devoted to the use of the public, and particularly of medical students: it was opened four years before his death. He left a considerable number of works, several of which were printed, others remain in manuscript in that library. His more important publications are a treatise, "De Subitaneis Mortibus;" "The Anatomical Plates of Eustachius, with a preface and notes, in folio;" and a dissertation, "De noxiis Paludum Effluviis," referring intermittents to the Marsh Miasmata, printed in 1717. After his death, a treatise "De Motu Cordis et Aneurysmatibus," and a collection of cases from his manuscript, were given to the public.

LANGRISH Browne, a physician of the last century, distinguished himself as an advocate for the mechanical theories of physiology and medicine, which he supported by numerous experiments. He had the merit of ascertaining several interesting facts in respect to the nature of the circulating powers. He died in London in 1759. His publications are, "A New Essay on Muscular Motion, &c." "Modern Theory of Physic;" "Physical Experiments upon Brutes;" and "Croonian Lectures on Muscular Motion."

Lao'nica cura'tio. A method of curing the gout, by evaporating the morbid matter by topical applications.

Lapa'ctica. (From *λαπαζω*, to evacuate.) Purgative medicines.

La'para. (From *λαπαζω*, to empty; so named from its concave and empty appearance.) The flank.

Laparoce'le. (From *λαπαρα*, the flank, and *κηλη*, a rupture.) A rupture through the side of the belly.

La'pathum. (From *λαπαζω*, to evacuate; so named because it purges gently.) The dock.

La'pathum aceto'sum. See *Rumex acetosa*.

La'pathum acu'tum. See *Rumex acutus*.

La'pathum aqua'ticum. See *Rumex hydrolapathum*.

La'pides cancro'rum. See *Cancer*.

Lapide'llum. *Lapidellus*. (From *la-*

pis, a stone.) The name of a kind of spoon, formerly used to take out small stones and fragments from the bladder.

LAPI'LLI CANCRO'RUM. Crab's stones, commonly called crab's eyes. See *Cancer.*

LA'PIS BE'ZOAR. See *Bezoar*.

LA'PIS CÆRU'LEUS. See *Lapis lazuli*.

LA'PIS CALAMINA'RIS. See *Calamine.*

LA'PIS CALCA'REUS. Lime-stone. Hard carbonate of lime.

LA'PIS CY'ANUS. See *Lapis lazuli.*

LA'PIS HÆMATI'TES, See *Hæmatites.*

LA'PIS HIBE'RNICUS. *Tegula hibernica. Ardesia hibernica. Hardesia.* Irish slate. A kind of slate, or very hard stone, found in different parts of Ireland, in a mass of a blueish black colour, which stains the hands. When dried and powdered, it is pale, or of a whitish blue, and, by keeping, grows black. In the fire it yields a sulphureous gas, and acquires a pale red colour, with additional hardness. It is occasionally powdered by the common people, and taken in spruce beer, against inward bruises.

LA'PIS HY'STRICIS. See *Bezoar hystricis.*

LA'PIS INFERNA'LIS. An old name for the caustic potash. See *Potassa fusa.*

LA'PIS LA'ZULI. *Lapis cyanus.* Azure stone. A combination of silex, the blue fluate of lime and sulphate of lime, and iron. This singular mixture forms a stone, of a beautiful opaque blue, which it preserves in a strong heat, and does not suffer any alteration by the contact of air. It was formerly exhibited as a purgative and vomit, and given in epilepsy.

LA'PIS MALACE'NSIS. See *Bezoar hystricis.*

LA'PIS PORCI'NUS. See *Bezoar hystricis.*

LA'PIS SI'MIÆ. See *Bezoar simiæ.*

LA'PPA MA'JOR. See *Arctium lappa.*

LA'PSANA. (Λαψανη, from *Lampsacus*, the town near which it flourished; or from λαπαζω, to evacuate; because it was said to relax the bowels.) *Lampsana. Napium. Papillaris herba.* Dock-cresses. Nipplewort. This plant, *Lapsana communis* of Linnæus, is a lactescent bitter, and nearly similar in virtues to the cichory, dandelion, and endive. It has been employed chiefly for external purposes, against wounds and ulcerations, whence the name of nipplewort and papillaris.

LA'QUEUS GU'TTURIS. A malignant inflammation of the tonsils, in which the patient appears as if he were suffocated with a noose.

LA'REASON. Antimony.

Larch-tree. See *Pinus larix.*

LARD. The English name of hog's fat, when melted down. Hog's lard, *adeps suilla*, forms the base of many unguents, and is often eaten by the poor instead of butter.

LARYNGOTOMY. (From λαρυγξ, the larynx, and τεμνω, to cut.) See *Bronchotomy.*

LARYNX. (*Larynx, -gis.* f. Λαρυγξ, a Greek prim.) A cartilaginous cavity, situated behind the tongue, in the anterior part of the fauces, and lined with an exquisitely sensible membrane. It is composed of the annular or cricoid cartilage, the scutiform or thyroid, the epiglottis and two arytænoid cartilages. The superior opening of the larynx is called the *glottis.* The *laryngeal arteries* are branches of the external carotids. The *laryngeal veins* evacuate their blood into the external jugulars. The nerves of the larynx are from the eighth pair. The use of the larynx is to constitute the organ of voice, and to serve also for respiration.

LASCI'VUS. (From *lacio*, to ensnare; upon account of its irregular motions.) An epithet used by Paracelsus for the chorea sancti viti.

LA'SER. (A term used by the Cyrenians.) The herb laser-wort, or assafœtida.

LASERPI'TIUM. (*Lac serpitium*, alluding to its milky juice.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

LASERPI'TIUM CHIRO'NIUM. *Panax.* Hercules' allheal or wound-wort. The seeds and roots of this plant are warm, and similar in flavour and quality to those of the parsnep. The roots and stalks have a much stronger smell, which resembles that of opoponax, and Boerhaave relates, that on wounding the plant in the summer, he obtained a yellow juice, which being inspissated a little in the sun, agreed perfectly in both respects with that exotic gum resin.

LASERPI'TIUM LATIFO'LIUM. The systematic name of the white gentian. *Gentiana alba.* The root of this plant, *Laserpitium latifolium, foliis cordatis, inciso-serratis*, of Linnæus, possesses stomachic, corroborant, and deobstruent virtues. It is seldom used.

LASERPI'TIUM SI'LER. The systematic name of the heart-wort. *Seseli. Siler montanum.* Sermountain. The seeds and roots of this plant, which grows in the southern parts of Europe, are directed as officinals. They have an agreeable smell, and a warm, glowing, aromatic taste; and, though neglected in this country, do not appear to be deservedly so.

LATERAL OPERATION. One mode of cutting for the stone is so called.

LATERAL SINUSSES. The bifurcation and continuation of the longitudinal sinus of the dura mater. They commence about the middle of the tentorium, one passing along each horizontal crucial spine, within the tentorium, and round to the foramen lacerum in basi cranii, where the internal jugular vein begins. Their use is to carry the blood from the brain into the internal jugulars, which return it to the heart.

La′tex. (*Latex*, *quod in venis terræ lateat.*) Water, or juice. A term sometimes applied to the blood, as being the spring or source of all the humours.

LATERITIOUS SEDIMENT. (*Lateritius*, from *later*, a brick.) A term applied to the brick-like sediment occasionally deposited in the urine of people afflicted with fever.

La′thyris. (From λαθω, to forget; because it was thought to affect the memory.) Spurge.

La′thyrus. (From λαθω, to lie hid; so called from its diminutive size.) The vetch.

Lati′bulum. (From *lateo*, to lie hid.) The fomes, or hidden matter of infectious diseases.

Lati′ssimus co′lli. See *Platysma myoides.*

LATI′SSIMUS DO′RSI. (*Latissimus*, sc. *musculus.*) *Antiscalptor* of Cowper. *Dorsi-lumbo sacro humeral* of Dumas. A muscle of the humerus, situated on the posterior part of the trunk. It is a very broad, thin, and, for the most part, fleshy muscle, which is placed immediately under the skin, except where it is covered by the lower extremity of the trapezius. It arises tendinous from the posterior half of the upper edge of the spine of the os ilium, from the spinous processes of the os sacrum and lumbar vertebræ, and from five or six, and sometimes from seven, and even eight, of the lowermost ones of the back; also tendinous and fleshy from the upper edges and external surface of the four inferior false ribs, near their cartilages, by as many distinct slips. From these different origins the fibres of the muscle run in different directions; those from the ilium and false ribs run almost perpendicularly upwards; those from the sacrum and lumbar vertebræ, obliquely upwards and forwards; and those from the vertebræ of the back, transversely outwards and forwards, over the inferior angle of the scapula, where they receive a small, thin bundle of fleshy fibres, which arise tendinous from that angle, and are inserted with the rest of the muscle, by a strong, flat, and thin tendon, of about two inches in length, into the forepart of the posterior edge of the groove observed between the two tuberosities of the os humeri, for lodging the tendon of the long head of the biceps. In dissection, therefore, this muscle ought not to be followed to its insertion, till some of the other muscles of the os humeri have been first raised. Its use is to pull the os humeri downwards and backwards, and to turn it upon its axis. Riolanus, from its use on certain occasions, gave it the name of *ani tersor.* When we raise ourselves upon our hands, as in rising from off an arm-chair, we may easily perceive the contraction of this muscle. A *bursa mucosa* is found between the tendon of this muscle and the os humeri, into which it is inserted.

Lauca′nia. (From λαυω, to receive; so called because it receives and conveys food.) The œsophagus of the throat.

Lau′danum. (From *laus*, praise; so named from its valuable properties.) See *Tinctura opii.*

Laurel, cherry. See *Prunus laurocerasus.*

Laurel, spurge. See *Daphne laureola.*

Laure′ola. (Dim. of *laurus*, the laurel; named from its resemblance to the laurel.) See *Daphne laureola.*

LAURO-CE′RASUS. (From *laurus*, the laurel, and *cerasus*, the cherry-tree; so called because it has leaves like the laurel.) See *Prunus laurocerasus.*

Lauro′sis. The spodium of silver; so called from Mount Laurus, where there were silver mines.

LAU′RUS. (From *laus*, praise; because it was usual to crown the heads of eminent men with branches of it.

1. The name of a genus of plants in the Linnæan system. Class, *Enneandria.* Order, *Monogynia.* The laurel.

2. The pharmacopœial name of the sweet-bay. See *Laurus nobilis.*

Lau′rus ca′mphora. The systematic name of the camphire-tree. It affords the substance called *camphora. Camphura. Caf. Cafar. Ligatura veneris. Caphora. Capur. Alkosor. Altesor.* Camphire. Camphor. A peculiar concrete substance prepared by distillation from the *Laurus camphora; foliis triplinerviis lanceolato-ovatis,* of Linnæus; a tree indigenous to Japan, where it grows abundantly. The camphire is found to lodge every where in the interstices of the fibres of the wood, pith, and knots of the tree. The crude camphire, exported from Japan, appears in small greyish pieces, and is intermixed with various extraneous matters; in this state it is received by the Dutch, and purified by a second sublimation; it is then formed into loaves, in which state it is sent to England. When pure it is white, semi-pellucid, somewhat unctuous to the touch; of a bitterish, aromatic, acrid taste, yet accompanied with a sense of coolness; of a fragrant smell, and approaching to that of rosemary, but much stronger. It is totally volatile and inflammable, soluble in vinous spirits, oils, and the mineral acids; not in water, fixed nor volatile alkaline liquors, nor in acids of the vegetable kingdom. The use of this important medicine, in different diseases, is very considerable. It has been much employed, with great advantage, in fevers of all kinds, particularly in nervous fevers, attended with delirium and much watchfulness. The experienced Werlhoff has witnessed its utility in several inflammatory diseases, and speaks highly in favour of its refrigerant qualities. The benefit derived from it in putrid fevers, where bark and acids are contra-indicated, is remarkable. In spasmodic and convulsive affections it is also of much service, and even in epilepsy. In chronic diseases this medicine is likewise employed; and against rheumatism, arthritis, and mania, we have several accounts of its efficacy. Nor is it less efficacious when applied externally in certain diseases: it dissipates inflammatory tumours in a short time; and its antiseptic quality, in resisting and curing gangrene, is very considerable. Another property peculiar to this medicine, must not, however, be omitted; the power it possesses of obviating the strangury that is produced by cantharides, when sprinkled over a blister. The preparations of camphor are, *spiritus camphoræ, linimentum camphoræ, tinctura camphoræ composita*, and the *mistura camphoræ*. Camphor, dissolved in acetic acid with some essential oils, forms the aromatic vinegar.

Lau'rus ca'ssia. This species yields the *Cassia lignea. Cortex canellæ Malabaricæ. Cassia lignea Malabarica. Xylo-cassia. Canella Malabarica et Javensis. Karva. Canella Cubana. Arbor Judaica. Cassia canella. Canellifera Malabarica. Cortex crassior. Cinnamomum Malabaricum. Calihacha canela.* Wild cinnamon-tree. Malabar cinnamon-tree or cassia lignea tree. Cassia lignea is the bark of the *Laurus cassia; foliis triplinerviis lanceolatis*, of Linnæus, whose leaves are called *folia malabathri* in the shops. The bark and leaves abound with the flavour of cinnamon, for which they may be substituted; but in much larger doses, as they are considerably weaker.

Lau'rus cinnamo'mum. The systematic name of the cinnamon-tree. *Cinnamomum.* The tree which affords the true cinnamon, which is its inner bark, is the *Laurus cinnamomum; foliis trinerviis ovato-oblongis; nervis versus apicem evanescentibus*, of Jacquin. Cinnamon bark is one of the most grateful of the aromatics; of a fragrant smell, and a moderately pungent, glowing, but not fiery taste, accompanied with considerable sweetness, and some degree of adstringency. It is one of the best cordial carminative, and restorative spices we are in possession of, and is generally mixed with the diet of the sick. The essential oil, on account of its high price, is seldom used: a tincture, simple and spirituous water, are directed to be kept in the shops. The watery infusion of cinnamon is given with advantage to relieve nausea and check vomiting.

Lau'rus culila'wan. The systematic name of the plant whose bark is called *cortex culilawan* in the shops. *Cullitlawan. Cortex caryophylloides.* The bark of the *Laurus culilawan; foliis triplinerviis oppositis*, of Linnæus. It very much resembles cinnamon in appearance and properties.

Lau'rus no'bilis. The systematic name of the sweet bay tree. *Laurus; foliis venosis lanceolatis perennantibus, floribus quadrifidis*, of Linnæus. This tree is a native of Italy, but cultivated in our gardens and shrubberies as a handsome evergreen. The leaves and berries possess the same medicinal qualities, both having a sweet fragrant smell, and an aromatic adstringent taste. The laurus of honorary memory, the distinguished favourite of Apollo, may be naturally supposed to have had no inconsiderable fame as a medicine; but its pharmaceutical uses are so limited in the practice of the present day, that this dignified plant is now rarely employed, except in the way of enema, or as an external application; thus the leaves are directed in the *decoctum pro fomento*, and the berries in the *emplastrum cumini.*

Lau'rus Pe'rsea. This species affords the *Avigato pear*, which, when ripe, melts in the mouth like marrow, which it greatly resembles in flavour. It is supposed to be the most nutritious of all the tropical fruits, and grows in vast abundance in the West Indies and New Spain. The unripe fruit have but little taste; yet, being very salubrious, are often eaten with salt and pepper. The sailors, when they arrive at the Havannah, and those parts, purchase them in great quantities; and chopping them into small pieces, with green capsicums, and a little salt, regale themselves heartily with them. They are esteemed also for their antidysenteric qualities, and are prepared in a variety of ways for the tables of the rich.

Lau'rus sa'ssafras. The systematic name of the sassafras-tree. *Sassafras. Cornus mas odorata. Lignum pavanum. Anhuiba.* The wood of this tree, *Laurus; foliis trilobis integrisque*, of Linnæus, is imported from North America, in long straight pieces, very light, and of a spongy texture, and covered with a rough, fungous bark. It has a fragrant smell, and a sweetish, aromatic, subacrid taste; the root, wood, and bark agree in their medicinal qualities, and are all mentioned in the pharmacopœias; but the bark is the most fragrant, and thought to be more efficacious than the woody part; and the branches are preferred to the large pieces. The medical character of this drug was formerly held in great estimation, and publications were professedly written on the subject. It is now, however, thought to be of little importance, and seldom used but in conjunction with other medicines, as a corrector of the fluids. It is an ingredient in the *decoctum sarsaparillæ compositum*, or *decoctum lignorum*; but the only officinal preparation of it is the essential oil, which is carminative and stimulant, and which may be given in the dose of two drops to ten.

Lava'ndula. See *Lavendula.*

Lavender, French. See *Lavendula stœchas.*

LAVE′NDULA. (From *lavo*, to wash; so called, because, on account of its fragrancy, it was used in baths.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*. Lavender.

2. The pharmacopœial name of the common lavender. See *Lavendula spica.*

Lave′ndula spi′ca. The systematic name of the common lavender. *Lavendula; foliis sessilibus lanceolato-linearibus margine revolutis, spica interrupta nuda*, of Linnæus. A native of the southern parts of Europe, but cultivated in our gardens on account of the fragrance of its flowers. Their taste is bitter, warm, and somewhat pungent; the leaves are weaker and less grateful. The essential oil, obtained by distillation, is of a bright yellow colour, of a very pungent taste, and possesses, if carefully distilled, the fragrance of the lavender in perfection. Lavender has been long recommended in nervous debilities, and various affections proceeding from a want of energy in the animal functions. The College directs an essential oil, a simple spirit, and a compound tincture, to be kept in the shops.

Lave′ndula stœ′chas. The systematic name of the French lavender. *Stœchas. Stœchas Arabica. Spica hortulana. Stucadore. Lavendula stœchas*, of Linnæus This plant is much less grateful in smell and flavour than the common lavender, to which it is allied in its properties.

La′ver. (From *lavo*, to wash; so named because it is found in brooks, where it is constantly washed by the stream.)

1. The brook-lime.

2. The English name of a species of fucus which is eaten as a delicacy.

Lavipe′dium. (From *lavo*, to wash, and *pes*, the foot.) A bath for the feet.

Lawso′nia ine′rmis. The systematic name of the true alkanna. *Alkanna vera. Alkanna Orientalis.* An Oriental plant; the *Lawsonia inermis, ramis inermibus*, of Linnæus; principally employed, in its native place, as a dye. The root is the officinal part; which, however, is rarely met with in the shops. It possesses adstringent properties, and may be used as a substitute for the *anchusa.*

Laxati′va. (From *laxo*, to loosen.) Gentle purgatives.

LAXA′TOR TY′MPANI. (From *laxo*, to loosen; so called from its office to relax the drum of the ear.) *Externus mallei*, of Albinus. *Anterior mallei*, of Winslow. *Obliquus auris*, of Douglas. *Externus auris vel laxator internus*, of Cowper, and *Spheni salpingo mallien*, of Dumas. A muscle of the internal ear, that draws the malleus obliquely forwards towards its origin; consequently the membrana tympani is made less concave, or is relaxed.

La′zulus. *Lazuli lapis.* (From *azul*, Arabian.) A precious stone, of a blue colour. The lapis lazuli.

LEAD. *Plumbum.* A metal found in considerable quantity in many parts of the earth, in different states, seldom, if at all, in the metallic state. It is found in that of oxide, *red lead ore*, mixed with a portion of iron, clay, and other earths. The colour of this ore is aurora red, resembling red arsenic. It is found in small lumps, of an indeterminate figure, and also crystallized in four-sided rhomboidal prisms.

Combined with carbonic acid, it forms the *sparry lead ore*, so called because it has the texture and crystallization of certain spars. There are a great many varieties of this kind. It is found also united with sulphuric, phosphoric, arsenic, molybdic, and chromic acids. Lastly, lead is found mineralized by sulphur, forming what is called *galena* (*sulphuret of lead*), which is by far its most abundant ore. This ore, which is very common, is found both in masses and crystals. The primitive form of its crystals is a cube. Its colour is of a blueish lead grey. It has a considerable metallic lustre, its texture is foliated. It stains the fingers, and often feels greasy. It contains in general a minute quantity of silver.

Properties of Lead. — Lead is of a blueish white colour, and very brilliant when fresh cut. It is malleable. It soon tarnishes in the atmosphere. It may easily be cut with a knife, and stains the fingers blueish-grey when rubbed. It fuses at 612° Fahr. and renders other more refractory metals fusible. It becomes vitrified in a strong and continued heat, and vitrifies various other metals. It is the least elastic of all the metals. It is very laminable, but it possesses very little ductility. Its specific gravity is 11.435. It crystallizes by cooling in small octahedra. When fused in contact with air, its surface first becomes yellow, and then red. It unites by fusion with phosphorus and sulphur. The greater part of the acids act upon it. The sulphuric acid requires the assistance of a boiling heat. Nitric acid is decomposed by it. Muriatic acid acts very weakly on it. Acetic acid dissolves it. Fluoric acid attacks it by heat, and slightly in the cold. It combines with other metals, but few of its alloys are applied to any use. When combined with mercury, it forms a crystallizable alloy which becomes fluid when triturated with that of bismuth.

Method of obtaining Lead.—In order to obtain lead in a great way, the ore is picked from among the extraneous matter with which it was naturally mixed. It is then pulverized and washed. It is next roasted in a reverberatory furnace, in which it is to be agitated, in order to bring the whole in contact with the air. When the external parts begin to soften, or assume the form of of a paste, it is covered with charcoal, the mixture is stirred, and the heat increased gradually; the lead then runs on all sides, and is collected at the bottom of the furnace, which is perforated so as to permit the metal to flow into a receptacle defended by a lining of charcoal.

The scoriæ remaining above in the furnace still retain a considerable proportion of lead; in order to extract it, the scoriæ must be fused in a blast furnace. The lead is by that means separated, and cast into iron moulds, each of which contains a portion called *a pig of lead.* These pigs are sold under the name of *ore lead.*

To disengage the silver from lead thus obtained, the metal is subjected to the action of the refining furnace. The continual application of a quantity of fresh air, which is thrown by means of large bellows upon the fused lead, which is at the same time heated as intensely as possible, oxidizes the lead, and converts it into the yellow scaly oxid, known by the name of *litharge.*

This scaly oxid being driven off from the surface of the fused metal, as it is formed, leaves the silver alone unaltered at the bottom.

The litharge is then to be fused in contact with charcoal, that it may assume the properties of metallic lead.

In order to obtain perfectly pure lead, the lead of commerce may be dissolved in pure nitric acid, and the solution be decomposed by adding to it, gradually, a solution of sulphate of soda, so long as a precipitate ensues. This precipitate, which is sulphate of lead, must then be collected on a filter, washed repeatedly in distilled water, and then dried. In order to reduce it to its metallic state, let it be mixed with two or three times its weight of black flux, introduce the mixture into a crucible, and expose it briskly to a red heat.

Lead, when injudiciously administered, or taken accidentally into the body, causes emaciation, violent colics, paralysis, tremors, and contractions of the limbs; and, as they generally come on gradually, the cause is sometimes overlooked till it be too late. Poisoning from lead is hardly ever intentional, but only accidental; either from liquors becoming impregnated with lead, by being improperly kept in vessels, lined or glazed with lead, or to which lead has been criminally added, to correct its acidity; or among manufacturers who work much with lead, as painters, or plumbers, and who are not sufficiently attentive to avoid swallowing it. The presence of lead in any suspected liquor, is detected by the hydro-sulphuret of potash, which forms with it a dark-brown precipitate, not soluble in diluted muriatic acid, and still more certainly by evaporating a portion of the liquor to dryness, and exposing the extract to a heat sufficient to reduce the lead.

The preparations of lead used in medicine are: —

1. Plumbi Subcarbonas. See *Plumbi subcarbonas.*
2. Oxidum plumbi rubrum. See *Minium.*
3. Oxidum plumbi semivitreum. See *Lithargyrus.*
4. Superacetas plumbi. See *Plumbi superacetas.*
5. Liquor plumbi subacetatis. See *Plumbi subacetatis liquor.*
6. Liquor plumbi subacetatis dilutus. See *Plumbi subacetatis liquor dilutus.*

LEAKE, JOHN, was born in Cumberland, and after qualifying himself as a surgeon in London, travelled to Portugal and Italy. On his return he settled in the metropolis, and published a dissertation on the Lisbon Diet Drink. He not long after became a licentiate of the college of physicians, and began to lecture on Midwifery. In 1765, he originated the plan for the Westminster Lying-in Hospital, and purchased a piece of ground for the purpose. His death occurred in 1792. He published a volume of "Practical Observations on Child-bed Fever;" "Medical Instructions" concerning the Diseases of Women; in two volumes, which passed through several editions; and some other works.

LEÆ'NA. (From λεαινα, a lioness; so named from its power.) A plaster for the hip.

LE'DUM PAL'USTRE. The systematic name of the rosmarinus sylvestris. The plant which bears this name in the pharmacopœias, is the *Ledum palustre*, of Linnæus. It has a bitter subastringent taste, and was formerly used in Switzerland in the place of hops. Its medicinal use is confined to the continent, where it is occasionally given in the cure of hooping-cough, sore throat, dysentery, and exanthematous diseases.

LE CLERC, DANIEL, was born at Geneva, in 1652. His father, being professor in the Greek language, instructed him in the rudiments of knowledge, and gave him a taste for researches into antiquity. He afterwards studied at different universities, and took his medical degree at Valence at the age of 20. Returning to his native city, he soon got into considerable practice; which he at length relinquished in 1704, on being appointed a member of the council of state, and that he might complete his various literary undertakings, which had already greatly distinguished him. His death occurred in 1728. He had published in conjunction, with Mangets, a

“Bibliotheca Anatomica,” in two volumes, 1685. But his most celebrated work is the “Histoire de la Medicine,” from the earliest times to that of Galen, which evinces immense erudition. He afterwards added a plan for continuing it to the middle of the 17th century. But Dr. Freind has completed this part of the task on a much better method. Le Clerc also published an account of certain worms occurring in men and animals.

LE DRAN, Henry Francis, was born at Paris in 1685, and educated under his father, who had acquired reputation as an operator, particularly in removing cancers of the breast. The young surgeon turned his attention principally to lithotomy, which he performed in the lateral method, and made some valuable improvements; which he communicated to the public in 1730, giving an accurate description of the parts: the work was favourably received, has been frequently reprinted, and translated into most modern languages. His surgical observations contain also much valuable practical matter: and his Treatise on Gun-shot Wounds is remarkable for the bold and successful measures, which he adopted. He published likewise a Treatise on Operations, another called Surgical Consultations; and sent several papers of considerable merit to the academy of surgeons, which appear in their memoirs. He died in 1770.

LEECH. *Hirudo.* A genus of insects belonging to the order of vermes intestina. The body moves either forward or backward. There are several species, principally distinguished by their colour; but that most known to medical men, is the *hirudo medicinalis*, or medicinal leech, which grows to the length of two or three inches. The body is of a blackish brown colour, marked on the back with six yellow spots, and edged with a yellow line on each side; but both the spots and lines grow faint, and almost disappear, at some seasons. The head is smaller than the tail, which fixes itself very firmly to any thing the creature pleases. It is viviparous, and produces but one young one at a time, which is in the month of July. It is an inhabitant of clear running waters, and is well known for its use in bleeding. The species most nearly approaching this, and which it is necessary to distingush, is the *hirudo sanguisuga*, or horse-leech. This is larger than the former; its skin is smooth and glossy; the body is depressed, the back is dusky; and the belly is of a yellowish green, having a yellow lateral margin. It inhabits stagnant waters.

The leech's head is armed with a sharp instrument that makes three wounds at once. They are three sharp tubercles, strong enough to cut through the skin of a man, or even of an ox, or horse. The mouth, is as it were the body of the pump, and the tongue, or fleshy nipple, the sucker; by the working of this piece of mechanism, the blood is made to rise up to the conduit which conveys it to the animal's stomach, which is a membranaceous skin, divided into twenty-four small cells. The blood which is sucked out is there preserved for several months, almost without coagulating, and proves a store of provision to the animal. The nutritious parts, absorbed after digestion by animals, need not in this to be disengaged from the heterogeneous substances; nor indeed is there an anus discoverable in the leech; mere transpiration seems to be all that it performs, the matter fixing on the surface of the body, and afterwards coming off in small threads. Of this, an experiment may be tried, by putting a leech into oil, where it keeps alive for several days; upon being taken out, and put into water, there appears to loosen from its body a kind of slough, shaped like the creature's body. The organ of respiration, though unascertained, seems to be situated in the mouth; for if, like an insect, it drew breath through vent-holes, it would not subsist in oil, as, by it, these would be stopped up.

The first species only is used in medicine; being applied to the skin in order to draw off blood. With this view they are employed to bleed young children, and for the purposes of topical bleeding, in cases of inflammation, fulness, or pain. They may be employed in every case where topical bleedings are thought necessary, or where venesection cannot be performed. If the leech does not fasten, a drop of sugared milk is put on the spot it is wished to fix on, or a little blood is drawn by means of a slight puncture; after which it immediately settles. The leech, when fixed, should be watched, lest it should find its way into the anus, when used for the hæmorrhoids, or penetrate into the œsophagus, if employed to draw the gums; otherwise it might fix upon the stomach, or intestines. In such a case, the best and quickest remedy is to swallow some salt: which is the method practised to make it loose its hold, when it sucks longer than is intended. Vegetable or volatile alkali, pepper, or acids, also make it leave the part on which it was applied. Cows and horses have been known to receive leeches, when drinking, into the throat; and the usual remedy is to force down some salt, which makes them fall off. If it is intended that the leech shall draw a larger quantity of blood, the end of the tail is cut off; and it then sucks continually, to make up the loss it sustains. The discharge occasioned by the puncture of a leech after the animal falls off is usually of more service than the process itself. When too abundant, it is easily stopped with brandy, vinegar, or other styptics, or with a compress of dry linen rags, bound strongly on the bleeding orifice. They are said to be very restless before a change of weather, if confined in glasses, and to fix themselves above the water on the approach of a fine day.

As these little animals are depended on for the removal of very dangerous diseases, and as they often seem capriciously determined to resist the endeavours made to cause them to adhere, the following directions are added, by which their assistance may, with more certainty, be obtained.

The introducing a hand, to which any ill-flavoured medicine adheres, into the water in which they are kept, will be often sufficient to deprive them of life; the application of a small quantity of any saline matter to their skin, immediately occasions the expulsion of the contents of their stomach; and what is most to our purpose, the least flavour of any medicament that has been applied remaining on the skin, or even the accumulation of the matter of perspiration, will prevent them from fastening. The skin should therefore, previous to their application, be very carefully cleansed from any foulness, and moistened with a little milk. The method of applying them is by retaining them to the skin by a small wine-glass, or the bottom of a large pill-box, when they will in general, in a little time, fasten themselves to the skin. On their removal, the rejection of the blood they have drawn may be obtained by the application of salt externally: but it is to be remarked, that a few grains of salt are sufficient for this purpose; and that covering them with it, as is sometimes done, generally destroys them.

LEEK. *Allium porrum.* A well-known vegetable, much employed for culinary purposes. The recent root and juice are exhibited internally in quartan fever, in dyspepsy, dropsy, asthma, and scurvy. See *Allium Porrum.*

Le'gna. (From λεγνον, a fringed edge.) The extremities of the pudenda muliebria.

LEGU'MEN. (From *lego*, to gather; so called because they are usually gathered by the hand.) All kinds of pulse are so called.

Lei'chen. See *Lichen.*

Leiente'ria. See *Lienteria.*

Leipopsy'chia. (From λειπω, to leave and ψυχη, the soul, or life.) A swoon. See *Syncope.*

Leipopy'ria. (From λειπω, to leave, and πυρ, heat.) A kind of ardent fever, where the internal parts are scorched with heat, while the external parts are cold.

Leipothy'mia. (From λειπω, to leave, and θυμος, the mind.) See *Lipothymia.*

Le'me. (From λα, much, and μυω, to wink.) A defect in the eyes, when they are always winking.

LEMERY, Nicholas, was born at Rouen in 1645, and brought up to the business of pharmacy. He went to Paris at the age of 21 to improve himself, particularly in chemistry; and then travelled for some years: after which in 1672 he began to give chemical lectures at Paris, and became very popular. Three years after he published his "Cours de Chymie," which passed rapidly through numerous editions; and so great was his reputation, that he acquired a fortune by the sale of his preparations, some of which he kept secret. In 1681 he was interdicted from lecturing on account of his religious principles, and took shelter in this country; but shortly after obtained the degree of doctor of physic at Caen, and got considerable practice in the French metropolis; the revocation of the edict of Nantes however forbidding this employment also, he was reduced to such difficulties, that he at length adopted the catholic religion. He then flourished again, and in 1697 published his "Pharmacopee Universelle," followed the year after by his "Dictionnaire Universel des Drogues simples," which, though with many imperfections, proved of considerable utility. On the re-establishment of the academy of sciences, he was made associate chemist, and read before that body his papers on antimony, which were printed in 1707. He died in 1715.

LEMERY, Louis, son of the preceding, was born at Paris in 1677, and intended for the law, but adopted such a partiality for his father's pursuits, that he was allowed to indulge it, and graduated in his native city in 1698. Two years after he was admitted into the academy of sciences, and in 1708 began to lecture on chemistry, in the royal garden: he was appointed physician to the Hotel Dieu in 1710; and twelve years after purchased the office of king's physician, which soon led to the appointment of consulting physician to the Queen of Spain. In 1731 he was appointed professor of chemistry in the royal garden; and subsequently communicated several papers to the academy of sciences, which appeared in their memoirs. He published also "Traite des Aliments," which was frequently reprinted; a Dissertation on the Nourishment of Bones, refuting the idea of its being effected by the Marrow; and three Letters on the Generation of Worms. He died in 1743.

Lemithocho'rton. See *Corallina Corsicana.*

Le'mma. (From λεπω, to decorticate.) Bark. The skin.

Le'mnius. (From *Lemnos*, whence it is brought.) A species of bole was called terra Lemnia, or earth of Lemnos.

Lemon. See *Citrus.*

Lemon scurvy-grass. See *Cochlearia officinalis.*

Lenie'ntia. (From *lenio*, to assuage.) Medicines which abate irritation.

Leniti′va. (From *lenis*, gentle.) Medicines which gently palliate diseases. Gentle purgatives.

Lenitive electuary. A preparation composed chiefly of senna and some aromatics, with the pulp of tamarinds. It is given in doses of a tea-spoonful, or more, frequently repeated, as a mild laxative; and, when fresh, it answers this purpose well. * See *Confectio Sennæ*.

LENS. (A *lentore*; from its glutinous quality.) 1. The lentil. See *Ervum Lens*.

2. See also *Crystalline lens*.

Lenti′cula. (Dim. of *lens*, a lentil.) A smaller sort of lentil. Also a freckle, or small pustule, resembling the seeds of lentil.

Lenti′cular. (From *lenticulaire*, doubly convex.) A surgical instrument employed for removing the jagged particles of bone from the edge of the perforation made in the cranium with the trephine.

Lenticula′ria. (From *lenticula*.) A species of lentil.

Lenti′go. (From *lens*, a lentil; so named from its likeness to lentil-seeds.) A freckle.

Lentil. An annual vegetable of the pulse kind, much used for improving the flavour of soups.

Lenti′scus. (From *lentesco*, to become clammy; so called from the gumminess of its juice.) The mastich-tree.

LE′NTOR. (From *lentus*, clammy.) A viscidity or siziness of any fluid.

Leoni′nus. (From *leo*, the lion.) An epithet of that sort of leprosy called leontiasis.

Leonti′asis. (From λεων, a lion; so called because it is said lions are subject to it.) A species of leprosy resembling the elephantiasis.

LEO′NTODON. (From λεων, the lion, and οδους, a tooth; so called from its supposed resemblance.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*. The dandelion.

Leo′ntodon tara′xacum. *Dens leonis*. The dandelion or pissabed. *Leontodon taraxacum; caule squamis inferne reflexis, foliis runcinatis, denticulatis, lævibus*, of Linnæus. The young leaves of this plant in a blanched state have the taste of endive, and make an excellent addition to those plants eaten early in the spring as salads; and Murray informs us, that at Goettingen, the roots are roasted and substituted for coffee by the poorer inhabitants, who find that an infusion prepared in this way can hardly be distinguished from that of the coffee-berry. The expressed juice of dandelion is bitter and somewhat acrid; but that of the root is bitterer, and possesses more medicinal power than any other part of the plant. It has been long in repute as a detergent and aperient, and its diuretic effects may be inferred from the vulgar name it bears in most of the European languages, *quasi lecti minga et urinaria herba dicitur*; and there are various proofs of its efficacy in jaundice, dropsy, consumption, and some cutaneous disorders.

The leaves, roots, flowers, stalks, and juice of dandelion, have all been separately employed for medical purposes, and seem to differ rather in degree of strength than in any essential property; therefore the expressed juice, or a strong decoction of the roots have most commonly been prescribed, from one ounce to four, two or three times a day. The plant should be always used fresh; even extracts prepared from it appear to lose much of their power by keeping.

Leontopo′dium. (From λεων, a lion, and πους, a foot so named from its supposed resemblance.) The herb lion's foot.

LEONU′RUS. (From λεων, a lion, and ουρα, a tail; so named from its likeness.) 1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*. Lion's tail.

2. The name, in some pharmacopœias, for the lion's tail.

Leonu′rus cardi′aca. The mother-wort. *Agripalma gallis. Marrubium. Cardiaca crispa. Leonurus cardiaca; foliis caulinis lanceolatis, trilobis*, of Linnæus. The leaves of this plant have a disagreeable smell and a bitter taste, and are said to be serviceable in disorders of the stomach of children, to promote the uterine discharge, and to allay palpitation of the heart.

Leopard's bane. See *Arnica*.

LEPI′DIUM. (From λεπις, a scale; so named from its supposed usefulness in cleansing the skin from scales and impurities.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia*. Order, *Siliculosa*. Pepper-wort.

Lepi′dium I′beris. *Iberis. Cardamantica*. Sciatica cresses. This plant possesses a warm, penetrating, pungent taste, like unto other cresses, and is recommended as an antiscorbutic, antiseptic, and stomachic.

Lepi′dium sati′vum. *Nasturtium hortense*. Dittander. This plant possesses warm, nervine, and stimulating qualities, and is given as an antiscorbutic, antiseptic, and stomachic, especially by the lower orders.

Lepidosarco′ma. (From λεπις, a scale, and σαρξ, flesh.) An irregular scaly tumour.

Lepi′sma. (From λεπιζω, to decorticate.) Decortication. A peeling off of the skin.

LE′PRA. (From λεπις, a scale; named from its appearance.) The leprosy. A disease in the class *cachexiæ*, and order *impetigines*, of Cullen. Dr. Willan describes this disease as characterised by scaly patches, of different sizes, but having always nearly a circular form. In this country, three varieties of the disease are observed, which he has described under the names of *Lepra vulgaris, Lepra alphos, Lepra nigricans.*

1. The *Lepra vulgaris* exhibits first small distinct elevations of the cuticle, which are reddish and shining, but never contain any fluid; these patches continue to enlarge gradually, till they nearly equal the dimensions of a crown-piece. They have always an orbicular, or oval form; are covered with dry scales, and surrounded by a red border. The scales accumulate on them, so as to form a thick prominent crust, which is quickly re-produced, whether it fall off spontaneously, or may have been forcibly detached. This species of lepra sometimes appears first at the elbow, or on the fore-arm; but more generally about the knee. In the latter case, the primary patch forms immediately below the patella; within a few weeks, several other scaly circles appear along the fore-part of the leg and thigh, increasing by degrees, till they come nearly into contact. The disease is then often stationary for a considerable length of time. If it advance further, the progress is towards the hip and loins; afterwards to the sides, back, shoulders, and, about the same time, to the arms and hands. In the greater number of cases, the hairy scalp is the part last affected; although the circles formed on it remain for some time distinct, yet they finally unite, and cover the whole surface on which the hair grows with a white scaly incrustation. This appearance is attended, more especially in hot weather, with a troublesome itching, and with a watery discharge for several hours, when any portion of the crust is detached, which takes place from very slight impressions. The pubes in adults is sometimes affected in the same manner as the head: and if the subject be a female, there is usually an internal *pruritus pudendi.* In some cases of the disorder, the nails, both of the fingers and toes, are thickened, and deeply indented longitudinally. When the lepra extends universally, it becomes highly disgusting in its appearance, and inconvenient from the stiffness and torpor occasioned by it in the limbs. The disease, however, even in this advanced stage, is seldom disposed to terminate spontaneously. It continues nearly in the same state for several years, or sometimes during the whole life of the person affected, not being apparently connected with any disorder of the constitution.

2. *Lepra alphos.* The scaly patches in the alphos are smaller than those of the lepra vulgaris, and also differ from them in having their central parts depressed or indented. This disorder usually begins about the elbow, with distinct, eminent asperities, of a dull red colour, and not much longer than papillæ. These, in a short time, dilate to nearly the size of a silver penny. Two or three days afterwards, the central part of them suffers a depression, within which small white powdery scales may be observed. The surrounding border, however, still continues to be raised, but retains the same size and the same red colour as at first. The whole of the fore-arm, and sometimes the back of the hand, is spotted with similar patches: they seldom become confluent, excepting round the elbow, which, in that case, is covered with an uniform crust. This affection appears in the same manner upon the joint of the knee, but without spreading far along the thigh or leg. Dr. Willan has seldom seen it on the trunk of the body, and never on the face. It is a disease of long duration, and not less difficult to cure than the foregoing species of lepra; even when the scaly patches have been removed by persevering in the use of suitable applications, the cuticle still remains red, tender, and brittle, very slowly recovering its usual texture. The alphos, as above described, frequently occurs in this country.

3. The *Lepra nigricans* differs little from the lepra vulgaris, as to its form and distribution. The most striking difference is in the colour of the patches, which are dark and livid. They appear first on the legs and fore-arms, extending afterward to the thighs, loins, neck, and hands. Their central part is not depressed, as in the alphos. They are somewhat smaller in size than the patches of the lepra vulgaris, and not only is the border livid or purplish, but the livid colour of the base likewise appears through the scaly incrustation, which is seldom very thick. It is further to be observed, that the scales are more easily detached than in the other forms of lepra, and that the surface remains longer excoriated, discharging lymph, often with an intermixture of blood, till a new incrustation forms, which is usually hard, brittle, and irregular. The lepra nigricans affects persons whose occupation is attended with much fatigue, and exposes them to cold or damp, and to a precarious or improper mode of diet, as soldiers, brewers, labourers, butchers, stage-coachmen, scullermen, &c.; some women are also liable to it, who are habituated to poor living and constant hard labour.

Le'pra græco'rum. The lepra vulgaris, alphos, and nigricans, have all been so denominated.

Leprosy. See *Lepra.*

Leptu'ntica. (From λεπτος, thin.) Attenuating medicines.

Lepty'smus. (From λεπτος, slender.) Attenuation, or the making a substance less solid.

Le'ros. (From ληρεω, to trifle.) A slight delirium.

LETHARGY. *Lethargus.* A heavy and constant sleep, with scarcely any intervals of waking; when awakened, the person answers, but ignorant or forgetful of what he said, immediately sinks into the same state of sleep. It is considered as an imperfect apoplexy, and is mostly symptomatic.

Lethe'a. (From ληθη, forgetfulness; so named because it causes forgetfulness.) The name of the poppy.

Lettuce, garden. See *Lactuca.*

Leucaca'ntha. (From λευκος, white, and ακανθα, a thorn; so named from its white-blossom.) The cotton-thistle.

Leuca'nthemum vulga're. (From λευκος, white, and ανθεμος, a flower; so called from its white floret.) See *Chrysanthemum leucanthemum.*

Leucele'ctrum. (From λευκος, white, and ηλεκτρον, amber.) White amber.

Leucola'chanum. (From λευκος, white, and λαχανον, a herb; so named from its colour.) Wild valerian.

LEUCO'MA. (From λευκος, white.) Leucoma and albugo are often used synonimously, to denote a white opacity of the cornea. Both of them, according to Scarpa, are essentially different from the nebula of the cornea; for they are not the consequence of chronic ophthalmy, attended with varicose veins, and an effusion of a milky serum into the texture of the delicate continuation of the conjunctiva over the cornea; but are the result of violent acute ophthalmy. In this state, a dense coagulating lymph is extravasated from the arteries; sometimes superficially, at other times deeply into the substance of the cornea. On other occasions, the disease consists of a firm callous cicatrix on this membrane, the effect of an ulcer, or wound, with loss of substance. The term *albugo*, strictly belongs to the first form of the disease; *leucoma* to the last, more particularly when the opacity occupies the whole, or the chief part, of the cornea.

Leuconymphæ'a. (From λευκος, white, and νυμφαια, the water-lily.) See *Nymphæa alba.*

Leucopha'gium. (From λευκος, white, and φαγω, to eat.) A medicated white food.

LEUCOPHLEGMA'SIA. (*Leucophlegmasia*, from λευκος, white, and φλεγμα, phlegm.) Leucophlegmatic habit. A term applied by the older medical writers to a dropsical habit of body.

Leuco'piper. (From λευκος, white, and πεπερι, pepper.) See *Piper nigrum.*

LEUCORRHŒ'A. (From λευκος, white, and ῥεω, to flow.) *Fluor albus.* The whites. An increased secretion of white mucus from the vagina of women, arising from debility, and not from the venereal virus.

Leuco'rrhois. (From λευκος, white, and ῥεω, to flow.) A discharge of mucus from the intestines.

LEVA'TOR. (From *levo*, to lift up.) A muscle whose office is to lift up the part to which it is attached.

LEVA'TOR A'NGULI O'RIS. Abducens labiorum, of Spigelius. *Elevator labiorum communis*, of Douglas. *Caninus* of Winslow, and *Sus maxillo labial*, of Dumas. A muscle situated above the mouth, which draws the corner of the mouth upwards, and makes that part of the cheek opposite to the chin prominent, as in smiling. It arises thin and fleshy from the hollow of the superior maxillary bone, between the root of the socket of the first grinder and the foramen infra orbitarium, and is inserted into the angle of the mouth and under lip, where it joins with its antagonist.

LEVA'TOR A'NI. *Levator magnus, seu internus*, of Douglas. *Pubo coccigi annulaire*, of Dumas. This muscle arises from the os pubis, within the pelvis, as far up as the upper edge of the foramen thyroideum, and joining of the os pubis with the os ischium, from the thin tendinous membrane that covers the obturator internus and coccygæus muscles, and from the spinous process of the ischium. From these origins all round the inside of the pelvis, its fibres run down like rays from the circumference to a center, to be inserted into the sphincter ani, acceleratores urinæ, and anterior part of the two last bones of the os coccygis, surrounding the extremity of the rectum, neck of the bladder, prostate gland, and part of the vesiculæ seminales. Its fibres, joining with those of its fellow, form a funnel-shaped hole, that draws the rectum upwards after the evacuation of the fæces, and assists in shutting it. The levatores ani also sustain the contents of the pelvis, and assist in ejecting the semen, urine, and contents of the rectum, and perhaps, by pressing upon the veins, contribute greatly to the erection of the penis.

LEVA'TOR LA'BII INFERIO'RIS. *Levator menti*, of Albinus. *Incisivus inferior*, of Winslow. *Elevator labii inferioris proprius*, of Douglas. A muscle of the mouth situated below the lips; it arises from the lower jaw, at the roots of the alveoli of two incisor teeth and the cuspidatus, and is inserted into the under lip and skin of the chin.

LEVA'TOR LA'BII SUPERIO'RIS ALÆ'QUE NA'SI. *Elevator labii superioris proprius*, of Douglas. *Incisivus lateralis et pyramidalis*, of Winslow. A muscle of the mouth and lips, that raises the upper lip towards the orbit, and a little outwards; it serves also to draw the skin of the nose upwards and outwards, by which the nostril is dilated. It arises by two distinct origins; the first, broad and fleshy, from the external part of the orbitar process of the superior maxillary bone, immediately above the foramen infra orbitarium; the second, from the nasal process of the superior maxillary bone, where it joins the os frontis. The first portion is inserted into the upper lip and orbicularis muscle, the second into the upper lip and outer part of the ala nasi.

LEVA'TOR LA'BII SUPERIO'RIS PRO'PRIUS. *Musculus incisivus.* It arises under the edge of the orbit, and is inserted into the middle of the lip.

Leva'tor o'culi. See *Rectus superior oculi.*

LEVA'TOR PALA'TI. *Levator palati mollis,* of Albinus. *Petrosalpingo-staphilinus, vel salpingo-staphilinus internus,* of Winslow. *Salpingo-staphilinus,* of Valsalva. *Pterigo-staphilinus externus vulgo,* of Douglas. *Spheno-staphilinus,* of Cowper. A muscle situated between the lower jaw and the os hyoides laterally. It arises tendinous and fleshy from the extremity of the petrous portion of the temporal bone, where it is perforated by the Eustachian tube, and also from the membranous part of the same tube, and is inserted into the whole length of the velum pendulum palati, as far as the root of the uvula, and unites with its fellow. Its use is to draw the velum pendulum palati upwards and backwards, so as to shut the passage from the fauces into the mouth and nose.

Leva'tor pala'ti mo'llis. See *Levator palati.*

LEVA'TOR PA'LPEBRÆ SUPERIO'RIS. *Aperiens palpebrarum rectus. Apertor oculi.* A proper muscle of the upper eyelid, that opens the eye, by drawing the eyelid upwards. It arises from the upper part of the foramen opticum of the sphenoid bone, above the rectus superior oculi, near the trochlearis, and is inserted by a broad thin tendon into the cartilage that supports the upper eyelid.

Leva'tor pa'rvus. See *Transverus perinei.*

LEVA'TOR SCA'PULÆ. A muscle situated on the posterior part of the neck, that pulls the scapula upwards and a little forwards. This name, which was first given to it by Riolanus, has been adopted by Albinus. Douglas calls it *elevator seu musculus patientiæ;* and Winslow, *angularis, vulgo levator proprius.* It is a long muscle, nearly two inches in breadth, and is situated obliquely under the anterior edge of the trapezius. It arises tendinous and fleshy from the transverse processes of the four and sometimes five superior vertebræ colli, by so many distinct slips, which soon unite to form a muscle that runs obliquely downwards and outwards, and is inserted by a flat tendon into the upper angle of the scapula. Its use is to raise the scapula upwards and a little forwards.

LEVIGATION. The reduction of hard substances, by triture, to impalpable powders.

Levi'sticum. (From *levo,* to assuage; so called from the relief it gives in painful flatulencies.) See *Ligusticum levisticum.*

LEVRET, Andrew, a French surgeon and accoucheur, was admitted into the Royal Academy of Surgery at Paris in 1742. He obtained considerable reputation by the improvements, which he made in some of the instruments used in difficult cases, and by the great number of pupils, whom he instructed. He was employed and honoured with official appointments by all the female branches of the Royal family. He published several works, which went through various editions and translations, mostly on obstetrical subjects; but there is one on the radical Cure of Polypi in different parts of the body.

Lexipha'rmaca. (From ληʃω, to terminate, and φαρμακον, poison.) Medicines which resist or destroy the power of poison.

Lexipy'reta. (From ληγω, to make cease, and πυρετος, a fever.) Febrifuge medicines.

Liba'dium. (From λιϐαζω, to make moist; so called because it grows in watery places.) The lesser centaury.

Libano'tis. (From λιϐανος, frankincense; so called from its resemblance in smell to frankincense.) Rosemary.

Li'banus. (From *Libanon,* a mountain in Syria, where it grows.) The frankincense-tree.

Li'bos. (From λειϐω, to distil.) A rheum or defluxion from the eyes.

Libu'rnum. (From *Liburnia,* the country where it flourished.) The mealy-tree.

LICETO, Fortunio, was son of a Genoese physician, and born in 1577. After prosecuting with diligence the requisite studies, he settled at Pisa at the age of twenty-two, and soon obtained the professorship of philosophy there; and in 1609 he received a similar appointment at Padua. Thence after twenty-seven years he removed to Bologna, being disappointed of the Medical chair; but on a vacancy occurring in 1645, he was induced, by the pressing invitations made to him, to accept the office; in which he continued till his death in 1657. He was a very copious writer, having published above fifty treatises on different subjects, and displayed much erudition; but no great acuteness or originality. His treatise "De Monstrorum Causis, Natura, et Differentiis" is best known, and shows him to have been very credulous; which appears farther from his belief, that the ancients had a method of making lamps, which should burn for ever without a fresh supply of fuel, and that such had been found in sepulchres.

Li'chanus. (From λειχω, to lick; so called because it is commonly used in licking up any thing.) The fore-finger.

LI'CHEN. (λειχην, or λιχην, a tetter, or ring-worm.) 1. The name of a disease, defined, by Dr. Willan, an extensive eruption of papulæ affecting adults, connected with internal disorder, usually terminating in scurf, recurrent, not contagious. The varieties of lichen he considers under the denominations of *Lichen* *simplex, Lichen agrius, Lichen pilaris, Lichen lividus,* and *Lichen tropicus.*

The *Lichen simplex* usually commences with head-ache, flushing of the face, loss of appetite, general languor, and increased quickness of the pulse. Distinct red papulæ arise first about the cheeks and chin, or on the arms; and, in the course of three or four days, the same appearance takes place on the neck, body, and lower extremities, accompanied with an unpleasant sensation of tingling, which is somewhat aggravated during the night. In about a week, the colour of the eruption fades, and the cuticle begins to separate; the whole surface is at length covered with scurfy exfoliations, which are particularly large, and continue longest in the flexures of the joints. The duration of the complaint is seldom in any two cases alike; ten, fourteen, seventeen, or sometimes twenty days intervene betwixt the eruption and the renovation of the cuticle. The febrile state, or rather the state of irritation at the beginning of this disorder, is seldom considerable enough to confine the patient to the house. After remaining five or six days, it is generally relieved on the appearance of the eruption. This, as well as some other species of the lichen, occurs about the beginning of summer, or in autumn, more especially affecting persons of a weak and irritable habit; hence women are more liable to it than men. Lichen simplex is also a frequent sequel of acute diseases, particularly fever and catarrhal inflammation, of which it seems to produce a crisis. In these cases the eruption has been termed, by medical writers, scabies critica. Many instances of it are collected under that title by Sauvages, Nosol. Method. Class x. Order 5. *Impetigines.*

The *Lichen agrius* is preceded by nausea, pain in the stomach, head-ache, loss of strength, and deep seated pains in the limbs, with fits of coldness and shivering; which symptoms continue several days, and are sometimes relieved by the papulous eruption. The papulæ are distributed in clusters, or often in large patches, chiefly on the arms, the upper part of the breast, the neck, face, back, and sides of the abdomen; they are of a vivid red colour, and have a redness, or some degree of inflammation, diffused round them to a considerable extent, and attended with itching, heat, and a painful tingling. Dr. Willan has observed, in one or two cases where it was produced from imprudent exposure to cold, that an acute disease ensued, with great quickness of the puse, heat, thirst, pains of the bowels, frequent vomiting, head-ache, and delirium. After these symptoms had continued ten days, or somewhat longer, the patient recovered, though the eruption did not return. The diffuse redness connecting the papulæ, and the tendency to become pustular, distinguish the lichen agrius from the lichen simplex, and the other varieties of this complaint, in which the inflammation does not extend beyond the basis of the papulæ, and terminates in scurf, or scales.

Lichen pilaris. This is merely a modification of the first species of lichen, and, like it, often alternates with complaints of the head, or stomach, in irritable habits. The peculiarity of the eruption is, that the small tubercles or asperities appear only at the roots of the hairs of the skin, being probably occasioned by an enlargement of their bulbs, or an unusual fulness of the blood-vessels distributed to them. This affection is distinguishable from the cutis anserina, by its permanency, by its red papulæ, and by the troublesome itching or tingling which attends it. If a part thus affected be violently rubbed, some of the papulæ enlarge to the size of wheals, but the tumour soon subsides again. The eruption continues more or less vivid for about ten days, and terminates, as usual, in small exfoliations of the cuticle, one of which surrounds the base of each hair. This complaint, as likewise the lichen agrius, frequently occurs in persons accustomed to drink largely of spirituous liquors undiluted.

Lichen lividus. The papulæ characterizing this eruption are of a dark red, or livid hue, and somewhat more permanent than in the foregoing species of lichen. They appear chiefly on the arms and legs, but sometimes extend to other parts of the body. They are finally succeeded, though at very uncertain periods, by slight exfoliations of the cuticle, after which a fresh eruption is not preceded, nor attended by any febrile symptoms. It principally affects persons of a weak constitution, who live on a poor diet, and are engaged in laborious occupations. Young persons, and often children living in confined situations, or using little exercise, are also subject to the lichen lividus; and in them, the papulæ are generally intermixed with petechiæ, or larger purple spots, resembling vibices. This circumstance points out the affinity of the lichen lividus with the purpura, or land-scurvy, and the connexion is further proved by the exciting causes, which are the same in both complaints. The same method of treatment is likewise successful in both cases. They are presently cured by nourishing food, moderate exercise in the open air, along with the use of Peruvian bark and vitriolic acid, or the tincture of muriated steel.

Lichen tropicus. By this term is expressed the prickly heat, a papulous eruption, almost universally affecting Europeans settled in tropical climates. The prickly heat appears without any preceding disorder of the constitution. It consists of numerous papulæ, about the size of a small pin's head, and elevation so as to produce a considerable roughness on the skin. The papulæ are of a vivid red colour, and often exhibit an irregular form, two or three of them being in many places united together; but no redness or inflammation extends to the skin in the interstices of the papulæ.

2. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Algæ*. There are several species, some of which are used in medicine.

Li'chen cani'nus. The systematic name of the ash-coloured ground liver-wort. *Lichen cinereus terrestris. Muscus caninus.* This cryptogamous plant, called ash-coloured ground liver-wort, and scientifically, *Lichen caninus* by Linnæus, has a weak, faint smell, and a sharpish taste. It was for a long time highly extolled as a medicine of singular virtue, in preventing and curing that dreadful disorder which is produced by the bite of rabid animals, but it is now deservedly forgotten.

Li'chen cine'reus terre'stris. See *Lichen caninus*.

Li'chen cocci'ferus. See *Lichen pyxidatus*.

Li'chen isla'ndicus. The medicinal qualities of the lichen islandicus have lately been so well established at Vienna, that this plant is now admitted into the materia medica of the London pharmacopœia. It is extremely mucilaginous, and to the taste bitter, and somewhat astringent. Its bitterness, as well as the purgative quality which it manifests, in its recent state, are in a great measure dissipated on drying, or may be extracted by a slight infusion in water; so that the inhabitants of Iceland convert it into a tolerably grateful and nutritive food. An ounce of this lichen, boiled a quarter of an hour in a pint of water, yielded seven ounces of a mucilage as thick as that procured by the solution of one part of gum-arabic in three of water.

The medical virtues of this lichen were probably first learned from the Icelanders, who employ it in its fresh state as a laxative; but when deprived of this quality, and properly prepared, we are told that it is an efficacious remedy in consumptions, coughs, dysenteries, and diarrhœas. Scopoli seems to have been the first who, of late years, called the attention of physicians to this remedy in consumptive disorders: and further instances of its success are related by Herz, Cramer, Tromsdorff, Ebeling, Paulisky, Stoll, and others, who bear testimony to its efficacy in most of the other complaints above-mentioned. Dr. Herz says, that since he first used the lichen in dysentery, he found it so successful, that he never had occasion to employ any other remedy; it must be observed, however, that cathartics and emetics were always repeatedly administered before he had recourse to the lichen, to which he also occasionally added opium. Dr. Crichton informs us, that during seven months' residence at Vienna, he had frequent opportunities of seeing the lichen islandicus tried in phthisis pulmonalis at the general hospitals, and confesses, "that it by no means answered the expectation he had formed of it." He adds, however, "from what I have seen, I am fully convinced in my own mind, that there are only two species of this disease where this sort of lichen promises a cure. The two species I hint at are the phthisis hæmoptoica, and the phthisis pituitosa, or mucosa. In several cases of these, I have seen the patients so far get the better of their complaints as to be dismissed the hospital cured, but whether they remained long so or not I cannot take upon me to say." That this lichen strengthens the digestive powers, and proves extremely nutritious, there can be no doubt; but the great medicinal efficacy attributed to it at Vienna, will not readily be credited at London. It is commonly given in the form of a decoction: an ounce and a half of the lichen being boiled in a quart of milk. Of this, a teacupful is directed to be drank frequently in the course of the day. If milk disagree with the stomach, a simple decoction of the lichen in water is to be used. Care ought to be taken that it be boiled over a slow fire, and not longer than a quarter of an hour.

Li'chen pyxida'tus. The systematic name of the cup-moss. *Muscus pyxidatus. Musculus pyxoides terrestris. Lichen pyxidatus major.* These very common little plants, *Lichen cocciferus*, and *pyxidatus*, of Linnæus, for both are used indifferently, are employed by the common people in this country in the cure of hooping-cough, in the form of decoction.

Li'chen plica'tus. The systematic name of the *muscus arboreus*. This plant, *Lichen plicatus*, of Linnæus, we are informed by that great botanist, is applied by the Laplanders to parts which are excoriated by a long journey. It is slightly astringent, and is applied with that intention to bleeding vessels.

Li'chen pulmona'rius. The systematic name of the officinal muscus pulmonarius quercinus. *Pulmonaria arborea.* This subastringent, and rather acid plant, *Lichen pulmonarius*, of Linnæus, was once in high estimation in the cure of diseases of the lungs, especially coughs, asthmas, and catarrhs. Its virtues are similar, and in no way inferior to those of the lichen islandicus.

Li'chen rocce'lla. The systematic name of the roccella of the shops. *Roccella.* The principal use of this plant is, as a blue dye. It has been employed medicinally with success in allaying the cough attendant on phthisis, and in hysterical coughs.

Li'chen saxa'tilis. The systematic name of the muscus cranii humani. *Usnea.* This moss, *Lichen saxatilis*, of Linnæus, when growing on the human skull, was formerly in high estimation, but is now deservedly forgotten.

LI'EN. (From λειος, soft, or smooth.) The spleen.

LI'EN SINA'RUM. The faba Ægyptia.

LIENTE'RIA. (From λειος, smooth, and εντερον, the intestine.) The Latins call it *lævitas intestinorum*. Lientery. Dr. Cullen makes it a species of diarrhœa. See *Diarrhœa*.

LIEUTAUD, JOSEPH, was born at Aix, in Provence, in 1703. A taste for botany induced him to travel into the countries which Tournefort had visited: and he brought back many plants unnoticed by that distinguished botanist: this gained him great applause, and he obtained the reversion of the chairs of Botany and Anatomy, which his maternal uncle had long filled. He was also appointed physician to the hospital at Aix, which led him to turn his attention chiefly to anatomy. His audience soon became numerous, and in 1742 he published a syllabus, entitled "Essais Anatomiques," which was many times reprinted, with improvements. He communicated also several papers on morbid anatomy, and on physiology, to the Academy of Sciences, of which he was elected a corresponding member. In 1749 he went to Versailles, Senac having obtained for him the appointment of physician to the Royal Infirmary; which act of friendship is ascribed to a liberal private communication of some errors committed by Senac. He there continued his investigations with great zeal, and was soon elected assistant anatomist to the Royal Academy, which he presented with many valuable memoirs. He also printed a volume, "Elementa Physiologiæ," composed for his class at Aix. In 1755 he was nominated physician to the royal family, and 20 years after first physician to Louis XVI. In 1759 his "Precis de la Medicine Pratique," appeared, which went through several editions; and seven years after, his "Precis de la Matiere Medicale." But his most important work, which still ranks high in the estimation of physicians, is entitled "Historia Anatomico-Medica," in 2 vols. quarto, 1767, containing numerous dissections of morbid bodies. His death occurred in 1780.

LIFE. To live, may be defined the property of acting from an intrinsic power; hence the life of an animal body appears to be threefold. 1. *Its chemical life,* which consists in that attraction of the elements, by which the vital principle, diffused through the solids and fluids, defends all the parts of the body from putrefaction. In this sense it may be said, that every atom of our body lives *chemically*, and that life is destroyed by putrefaction alone. 2. *Its physical life,* which consists in the irritability of the parts. This physical property remains for some time after death. Thus the heart or intestines removed from the body, whilst still warm, contract themselves on the application of a stimulus. In like manner the serpent, or eel, being cut into pieces, each part moves and palpitates for a long time afterwards. Hence these parts may be said to live *physically*, as long as they continue warm and soft. 3. *Its physiological life* consists in the action of inorganic parts proper to each, as the action of the heart and vessels; so that, these actions ceasing, the body is said to be physiologically dead. The physiological life ceases first, next the physical, and finally the chemical perishes.

LIGAMENT. (From *ligo*, to bind.) Ligaments are elastic and strong membranes connecting the extremities of the moveable bones. They are divided into *capsular*, which surround joints like a bag, and *connecting* ligaments. The use of the capsular ligaments is to connect the extremities of the moveable bones, and prevent the efflux of synovia; the external and internal connecting ligaments strengthen the union of the extremities of the moveable bones.

A Table of the principal Ligaments:

Ligaments of the lower jaw. The condyles of the lower jaw are connected with the articular sinuses of the temporal bone by two ligaments, the capsular, and lateral.

Ligaments of the occipital bone, and vertebræ of the neck. The condyles of the occipital bone are united with the articular depressions of the first vertebra by the capsular, broad anterior, and posterior ligaments, the ligaments of the odontoid process, and the ligamentum nuchæ.

Ligaments of the vertebræ. The vertebræ are connected together by means of their bodies and oblique processes. The bodies by a soft cartilaginous substance interposed between, and the processes by ligaments, viz. the transverse ligament of the first vertebræ; the anterior and posterior common ligaments; the interspinous; the intertransverse; the intervertebral ligaments; the capsular ligaments of the oblique processes; and the ligaments of the last vertebræ of the loins with the os sacrum.

Ligaments of the ribs. The posterior extremity of the ribs is united with the vertebræ; the anterior with the sternum. The ligaments of the posterior extremity are, the capsular ligaments of the greater and lesser heads; the internal and external ligaments of the neck of the ribs; and a ligament peculiar to the last rib. The ligaments of the anterior extremity are, the capsular ligaments of the cartilages of the true ribs, and the ligaments of the ribs *inter se.*

Ligaments of the sternum. The ligaments connecting the three portions of the sternum to the ribs are, the membrana propria of the sternum: and the ligaments of the ensiform cartilage.

Ligaments of the pelvis. The ligaments which connect the ossa innominata with the os sacrum are, three ligamenta ilio sacra; two sacro-ischiatic ligaments; two transverse ligaments of the pelvis; to which may be added the ligamentum obturans of the foramen ovale, and the ligamentum Pouparti, or inguinale. See *Pelvic Ligaments.*

Ligaments of the os coccygis. The basis of the os coccygis is connected to the apex of the os sacrum, by the capsular and longitudinal ligaments.

Ligaments of the clavicle. The anterior extremity is connected with the sternum and first rib; and the posterior extremity with the acromion of the scapula; by the interclavicular, and capsular ligaments, the ligamentum rhomboideum, and in the posterior extremity, the capsular ligament.

Ligaments of the scapula. The proper ligaments which connect the scapula with the posterior extremity of the clavicle are, the conoid and trapezoid ligaments.

Ligaments of the humerus. The head of the humerus is connected with the glenoid cavity of the scapula by the capsular ligament.

Ligaments of the articulation of the cubit. The elbow-joint is formed by the inferior extremity of the humerus, and superior extremities of the ulna and radius. The ligaments connecting these bones are, the capsular, the brachio-cubital, and the brachio-radial ligaments.

Ligaments of the radius. The radius is affixed to the humerus, cubit, and carpus, by peculiar ligaments, namely, the superior, inferior, oblique, and interosseous ligaments.

Ligaments of the carpus. The ligaments which connect the eight bones of the wrist together, and with the fore-arm and metacarpus, are, the capsular ligament of the carpus; the first and second transverse ligaments, the oblique ligaments, and the capsular ligaments proper to the bones of the carpus.

Ligaments of the metacarpus. The bones of the metacarpus are in part connected with the second row of bones of the carpus, and in part together, by the articular and interosseous ligaments.

Ligaments of the fingers. The phalanges of the fingers and thumb are connected together, and with the metacarpus by the capsular and lateral ligaments.

Ligaments which keep the tendons of the muscles of the hand in their proper place. The ligaments which keep the tendons of the muscles of the hand in their place, are situated partly on the palm and partly on the back of the hand. In the back of the hand are, the external transverse ligament of the carpus, the vaginal, and the transverse ligaments of the extensor tendons. In the palm of the hand are, the internal transverse ligament of the carpus, the vaginal or crucial ligaments of the flexor tendons of the phalanges, and the accessory ligaments of the flexor tendons.

Ligaments of the articulation of the femur. The head of the os femoris is strongly annexed to the acetabulum of the os innominatum, by two very strong ligaments, the capsular ligament, and ligamentum teres, or restraining ligament.

Ligaments of the articulation of the knee. The knee-joint is formed by the condyles of the os femoris, the head of the tibia and the patella. The ligaments are the capsular, the posterior, the external and the internal lateral ligaments, the crucial and the alar ligaments, the ligaments of the semilunar cartilages, and the ligaments of the patella.

Ligaments of the fibula. The fibula is connected with the tibia by means of the capsular ligament of the superior extremity, the interosseous ligament, and the ligaments of the inferior extremity.

Ligaments of the articulation of the tarsus. The inferior extremity of the tibia and fibula forms the cavity into which the astragalus of the tarsus is received. This articulation is effected by the anterior, middle, and posterior ligaments of the fibula, the ligamentum tibiæ deltoides, the capsular ligament, and the ligaments proper to the bones of the tarsus.

Ligaments of the metatarsus. The bones of the metatarsus are connected in part together, and in part with the tarsus, by means of the capsular ligament, the articular ligaments, the transverse ligaments in the back and sole of the foot, and the interosseous ligaments of the metatarsus.

Ligaments of the toes. The phalanges of the toes are united partly together, and partly with the metatarsus, by the capsular and lateral ligaments.

Ligaments which retain the tendons of the muscles of the foot in their proper place. These ligaments are found partly in the back and partly in the sole of the foot. They are the vaginal ligament of the tibia, the transverse or crucial ligaments of the tarsus, the ligaments of the tendons of the peronei muscles, the laciniated ligament, the vaginal ligament of the extensor muscle and flexor pollicis, the vaginal ligaments of the flexor tendons, the accessory ligaments of the flexor tendons, and the transverse ligaments of the extensor tendons.

LIGAME'NTUM ANNULA'RE. The annular ligament. A strong ligament on each ankle and each wrist.

LIGAME'NTUM ARTERIO'SUM. The ductus arteriosus of the fœtus becomes a ligament after birth, which is so called.

LIGAME'NTUM CILIA'RE. Behind the uvea of the human eye, there arise out of the choroid membrane, from the ciliary circle, white complicated striæ, covered with a black matter. The fluctuating extremities of these striæ are spread abroad even to the crystalline lens, upon which they lie, but are not affixed. Taken together they are called *ligamentum ciliare.*

LIGAME'NTUM DENTICULA'-

TUM. A small ligament supporting the spinal marrow.

LIGAME'NTUM FALLO'PII. The ligamentum rotundum uteri has been so called. See also *Ligamentum Pouparti.*

LIGAME'NTUM INTERO'SSEUM. The ligament uniting the radius and ulna, and also that between the tibia and fibula.

LIGAME'NTUM LA'TUM. The broad ligament of the liver, and that of the uterus. See *Liver*, and *Uterus.*

LIGAME'NTUM NU'CHÆ. A strong ligament of the neck, which proceeds from one spinous process to another.

LIGAME'NTUM OVA'RII. The thick round portion of the broad ligament of the uterus, by which the ovarium is connected with the uterus. The antients supposed this was hollow, to convey the female semen into the uterus.

LIGAME'NTUM POUPA'RTI. Fallopian ligament. Poupart's ligament. A ligament extending from the anterior superior spinous process of the ilium to the crista of the os pubis.

LIGAME'NTUM ROTU'NDUM. The round ligament of the uterus. See *Uterus.*

LIGATURE. (From *ligo*, to bind.) A thread, or silk, of various thickness, covered with white wax, for the purpose of tying arteries, or veins, or other parts. They should be round and very firm, so as to allow being tied with some force, without risk of breaking.

The immediate effect of a tight ligature on an artery is to cut through its middle and internal coats, a circumstance that tends very much to promote the adhesion of the opposite sides of the vessel to each other. Hence the form and mode of applying a ligature to an artery should be such as are most certain of dividing the above coats of the vessel in the most favourable manner. A broad flat ligature does not promise to answer the purpose in the best manner; because it is scarcely possible to tie it smoothly round the artery, which is very likely to be thrown into folds, or to be puckered by it, and consequently to have an irregular bruised wound made in its middle and internal coats. A ligature of an irregular form is likely to cut through these coats more completely at some parts than at others; and if it does not perfectly divide them, no adhesion can take place, and secondary hæmorrhage will follow. A fear of tying the ligature too tight may often lead to the same consequences.

LIGHT. *Lux.* The nature of light has occupied much of the attention of philosophers, and numerous opinions have been entertained concerning it. It has been sometimes considered as a distinct substance, at other times as a quality; sometimes as a cause, frequently as an effect; by some it has been considered as a compound, by others as a simple substance. Philosophers of the present day are mostly agreed as to the independent existence of light, or the cause by which we see.

Nature of Light.

Light is that which proceeds from any body producing the sensation of vision, or perception of other bodies, by depicting an image of external objects on the retina of the eye. Hence it announces to animals the presence of the bodies which surround them, and enables them to distinguish these bodies into transparent, opaque, and coloured. These properties are so essentially connected with the presence of light, that bodies lose them in the dark, and become undistinguishable.

Light is regarded by philosophers as a substance consisting of a vast number of exceedingly small particles, which are actually projected from luminous bodies, and which probably never return again to the body from which they were emitted.

It is universally expanded through space. It exerts peculiar actions, and is obedient to the laws of attraction, and other properties of matter.

Explanation of certain terms of Light.

In order to facilitate the doctrine of light, we shall shortly explain a few terms made use of by philosophers when treating of it; namely:

A *ray of light* is an exceedingly small portion of light as it comes from a luminous body.

A *medium* is a body which affords a passage for the rays of light.

A *beam of light* is a body of parallel rays.

A *pencil of rays* is a body of diverging or converging rays.

Converging rays are rays which tend to a common point.

Diverging rays are those which come from a point, and continually separate as they proceed.

The rays of light are *parallel*, when the lines which they describe are so.

The *radiant point* is the point from which diverging rays proceed.

The *focus* is the point to which the converging rays are directed.

Sources of Light.

Light is emitted from the sun, the fixed stars, and other luminous bodies. It is produced by percussion, during electrisation, combustion, and in various other chemical processes.

Why the sun and stars are constantly emitting light, is a question which probably will for ever baffle human understanding.

The light emitted during combustion exists previously, either combined with the combustible body, or with the substance which supports the combustion. The light liberated during chemical action, formed a constituent part of the bodies which act on each other.

Chemical Properties of Light.

The chemical effects of light have much engaged the attention of philosophers. Its influence upon animal, vegetable, and other substances, is as follows:

1. *Effects of Light on Vegetables.*

Every body knows that most of the discous flowers follow the sun in his course; that they attend him to his evening retreat, and meet his rising lustre in the morning with the same unerring law. It is also well known that the change of position in the leaves of plants, at different periods of the day, is entirely owing to the agency of light, and that plants which grow in windows, in the inside of houses, are, as it were, solicitous to turn their leaves towards the light. Natural philosophers have long been aware of the influence of light on vegetation. It was first observed that plants growing in the shade, or darkness, are pale and without colour. The term, *etiolation*, has been given to this phenomenon, and the plants, in which it takes place, are said to be *etiolated*, or *blanched*. Gardeners avail themselves of the knowledge of this fact, to furnish our tables with white and tender vegetables. When the plants have attained a certain height, they compress the leaves, by tying them together, and by these means (or by laying earth over them) deprive them of the contact of light: and thus it is that our white celery, lettuce, cabbages, endive, &c. are obtained. For the same reason, wood is white under the green bark; and roots are less coloured than plants; some of them alter their taste, &c.; they even acquire a deleterious quality when suffered to grow exposed to light. Potatoes are of this kind. Herbs that grow beneath stones, or in places utterly dark, are white, soft, aqueous, and of a mild and insipid taste. The more plants are exposed to the light, the *more colour* they acquire. Though plants are capable of being nourished exceedingly well in perfect obscurity, and in that state they even grow much more rapidly than in the sun, (provided the air that surrounds them is fit for vegetation,) they are colourless and unfit for use.

Professor Davy found, by experiment, that red rose-trees, carefully excluded from light, produce roses almost white. He likewise ascertained that this flower owes its colour to light entering into its composition, that pink, orange, and yellow flowers imbibe a smaller portion of light than red ones, and that white flowers contain no light.

But vegetables are not only indebted to the light for their colour: taste and odour are likewise derived from the same source.

Light contributes greatly to the maturity of fruits and seeds. This seems to be the cause why, under the burning sun of Africa, vegetables are in general more odoriferous, of a stronger taste, and more abounding with resin. From the same cause it happens that hot climates seem to be the native countries of perfumes, odoriferous fruits, and aromatic resins.

The action of light is so powerful on the organs of vegetables, as to cause them to pour forth torrents of pure air from the surface of their leaves into the atmosphere, while exposed to the sun; whereas, on the contrary, when in the shade, they emit an air of a noxious quality. Take a few handsful of fresh-gathered leaves of mint, cabbage, or any other plant; place them in a bell-glass, filled with fresh water, and invert it into a bason with the same fluid. If the whole be then exposed to the direct rays of the sun, small air bubbles will appear on the surface of the leaves, which will gradually grow larger, and at last detach themselves and become collected at the surface of the water. This is oxygen gas, formerly called vital air.

All plants do not emit this air with the same facility: there are some which yield it the moment the sun acts upon them, as the jacobœa, or rag-wort, lavender, peppermint, and some other aromatic plants. The leaves afford more air when attached to the plant than when gathered; the quantity is also greater, the fresher and sounder they are, and if full grown and collected during dry weather. Green plants afford more air than those which are of a yellowish or white colour. Green fruits afford likewise oxygen gas; but it is not so plentifully furnished by those which are ripe. Flowers in general render the air noxious. The nasturtium indicum, in the space of a few hours, gives out more air than is equal to the bulk of all its leaves.

On the contrary, if a like bell-glass, prepared in the same manner, be kept in the dark, another kind of air will be disengaged, of an opposite quality.

There is not a substance which, in well-closed glass vessels, and exposed to the sun's light, does not experience some alteration.

Camphor kept in glass bottles, exposed to light, crystallizes, or vegetates, into the most beautiful symmetrical figures, on that side of the glass which is exposed to the light.

Yellow wax, exposed to the light, loses its colour, and becomes bleached. Gum guaiacum reduced to powder, becomes green on exposure to light. Vegetable colours, such as those of saffron, logwood, &c. become pale, or white, &c.

2. *Effects of Light on Animals.*

The human being is equally dependent on the influence of light.

Animals in general droop when deprived of light, they become unhealthy and even sometimes die. When a man has been long confined in a dark dungeon, (though well aired,) his whole complexion becomes sallow; pustules, filled with aqueous humours, break out on his skin; and the person, who has been thus deprived of light, becomes languid, and frequently dropsical.

Worms, grubs, and caterpillars, which live in the earth, or in wood, are of a whitish colour; moths, and other insects of the night, are likewise distinguishable from those which fly by day by the want of brilliancy in their colour. The difference between those insects, in northern and southern parts, is still more obvious.

The parts of fish which are exposed to light, as the back, fins, &c. are uniformly coloured, but the belly, which is deprived of light, is white in all of them.

Birds which inhabit the tropical countries have much brighter plumage than those of the north. Those parts of the birds which are not exposed to the light are uniformly pale. The feathers on the belly of a bird are generally pale, or white; the back, which is exposed to the light, is almost always coloured; the breast, which is particularly exposed to light in most birds, is brighter than the belly.

Butterflies, and various other animals of equatorial countries, are brighter coloured than those of the polar regions. Some of the northern animals are even darker in summer and paler in winter.

3. *Effects of Light on other Substances.*

Certain metallic oxides become combustible when exposed to light; and acids, as the nitric, &c. are decomposed by its contact, and various other substances change their nature.

Light carbonated hydrogen. See *Carburetted hydrogen gas.*

Li′gnum aga′llochi ve′ri. See *Lignum aloes.*

Li′gnum a′loes. *Lignum agallochi veri. Lignum calambac. Lignum aspalathi. Xylo aloes. Agallochum. Calambac.* Aloes-wood. The tree whose wood bears this name is not yet scientifically known. It is imported from China in small compact, ponderous pieces, of a yellow rusty brown colour, with black or purplish veins, and sometimes of a black colour. It has a bitterish resinous taste, and a slight aromatic smell. It is used to fumigate rooms in Eastern countries.

Li′gnum aspa′lathi. See *Lignum aloes.*

Li′gnum cala′mbac. See *Lignum aloes*

LI′GNUM CAMPECHE′NSE. (*Campechensis*; so called because it was brought from Campeachy, in the bay of Honduras.) See *Hæmatoxylon campechianum.*

Li′gnum i′ndicum. See *Guaiacum.*

Li′gnum molucce′nse. See *Croton tiglium.*

Li′gnum nephri′ticum. See *Guilandina moringa.*

Li′gnum pava′næ. See *Croton tiglium.*

Li′gnum rho′dium. See *Rhodium lignum.*

Li′gnum sa′nctum. See *Guaiacum.*

Li′gnum sa′ntali ru′bri. See *Pterocarpus santalinus.*

Li′gnum sa′ppan. See *Hæmatoxylon campechianum.*

Li′gnum serpe′ntum. The wood of the *Ophioxylum serpentinum* of Linnæus. It is said to be an alexipharmic.

Ligu′sticum levi′sticum. The systematic name of lovage. *Levisticum.* The odour of this plant, *Ligusticum levisticum: foliis multiplicibus, foliolis superne incisis,* of Linnæus, is very strong, and particularly ungrateful; its taste is warm and aromatic. It abounds with a yellowish gummy-resinous juice, very much resembling opoponax. Its virtues are supposed to be similar to those of angelica and master-wort, in expelling flatulences, exciting sweat, and opening obstructions; therefore it is chiefly used in hysterical disorders and uterine obstructions. The leaves, eaten in sallad, are accounted emmenagogue. The root, which is less ungrateful than the leaves, is said to possess similar virtues, and may be employed in powder.

LIGU′STRUM. (From *ligo*, to bind; so named from its use in making bands.) 1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.*

2. The pharmacopœial name of the herb privet.

Lilia′go. (Dim. of *lilium*, the lily; so named from the resemblance of its flower to that of a lily.) *Liliastrum.* Spiderwort; formerly said to be alexipharmic and carminative.

LI′LIUM. (From λειος, smooth, graceful; so named from the beauty of its leaf.) The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.* The lily.

Li′lium a′lbum. The white lily. See *Lilium candidum.*

Li′lium ca′ndidum. The systematic name of the white lily. *Lilium album.* The roots of the common white lily, *Lilium candidum: foliis sparsis, corollis campanulatis, intus glabris,* of Linnæus, are directed by the Edinburgh pharmacopœia; they are extremely mucilaginous, and chiefly used, boiled in milk and water, in emollient and suppurating cataplasms, to inflammatory tumours. These lily-roots afford a good substitute, in times of scarcity, for bread. The distilled water has been sometimes used as a cosmetic.

Li'lium conva'llium. See *Convallaria majalis.*

Lily, May. See *Convallaria majalis.*

Lily, white. See *Lilium candidum.*

Lily, water. See *Nymphæa alba,* and *Nymphæa lutea.*

Lily of the valley. See *Convallaria majalis.*

LIMATU'RA FERRI. Steel filings are considered as possessing stimulating and strengthening qualities, and are exhibited in worm cases, ataxia, leucorrhœa, diarrhœa, chlorosis, &c.

LI'MAX. (From *limus,* slime; so named from its sliminess.) *Cochlea terrestris.* The snail. This animal abounds with a viscid slimy juice, which is readily given out by boiling, to milk or water, so as to render them thick and glutinous. These decoctions are apparently very nutritious and demulcent, and are recommended in consumptive cases and emaciations.

LIME. *Calx.* An earth found in great abundance in nature, though never pure, or in an uncombined state. It is always united to an acid, and very frequently to the carbonic acid, as in chalk, common lime-stone, marble, calcareous spar, &c. It is contained in the waters of the ocean; it is found in vegetables; and is the basis of the bones, shells, and other hard parts of animals. Its combination with sulphuric acid is known by the name of sulphate of lime (*gypsum,* or plaster of Paris.) Combined with fluoric acid it constitutes fluate of lime, or Derbyshire spar.

Properties.—Lime is in solid masses, of a white colour, moderately hard, but easily reducible to powder. Its taste is bitter, urinous, and burning. It changes blue cabbage juice to a green. It is unalterable by the heat of our furnaces. It splits and falls into powder in the air, and loses its strong taste. It is augmented in weight and in size by slowly absorbing water and carbonic acid from the atmosphere. Its specific gravity is 2.3. It combines with phosphorus by heat. It unites to sulphur both in the dry and humid way. It absorbs sulphuretted hydrogen gas. It unites with some of the metallic oxids. Its slaking by water is attended with heat, hissing, splitting, and swelling up, while the water is partly consolidated and partly converted into vapour; and the lime is reduced into a very voluminous dry powder, when it has been sprinkled with only a small quantity of water. It is soluble when well prepared in about 450 parts of water. It unites to acids. It renders silex and alumine fusible, and more particularly these two earths together.

Method of obtaining Lime.—Since the carbonic acid may be separated from the native carbonate of lime, this becomes a means of exhibiting the lime in a state of tolerable purity. For this purpose, introduce into a porcelain, or earthen retort, or rather into a tube of green glass, well coated over with lute, and placed across a furnace, some powdered Carara marble, or oyster-shell powder. Adapt to its lower extremity a bent tube of glass, conveyed under a bell. If we then heat the tube we obtain carbonic acid gas; and lime will be found remaining in the tube, or retort.

The burning of lime in the large way, depends on the disengagement of the carbonic acid by heat; and, as lime is infusible in our furnaces, there would be no danger from too violent a heat, if the native carbonate of lime were perfectly pure, but as this is seldom the case, an extreme degree of heat produces a commencement of vitrification in the mixt stone, and enables it to preserve its solidity, and it no longer retains the qualities of lime, for it is covered with a sort of crust, which prevents the absorption of the water when it is attempted to be slaked. This is called over-burnt lime.

In order to obtain lime in a state of great purity, the following method may be had recourse to.

Take Carara marble, or oyster-shells; reduce them to powder, and dissolve the powder in pure acetic acid; precipitate the solution by carbonate of ammonia. Let the precipitate subside, wash it repeatedly in distilled water, let it dry, and then expose it to a white heat for some hours.

The acetic acid, in this operation, unites to the lime, and forms acetate of lime, disengaging at the same time the carbonic acid which flies off in the gaseous state: on adding to the acetate of lime carbonate of ammonia, acetate of ammonia, and an artificial carbonate of lime are formed; from the latter the carbonic acid is again expelled, by exposure to heat, and the lime is left behind in a state of perfect purity.

Lime-tree. See *Tilia.*

Lime-water. See *Calx.*

LIMES. A fruit like a small lemon, the juice of which is a very strong acid, and very much used in the making of punch. Externally, the same acid is applied in the cutaneous affections of warm climates, and also as a remedy against the pains that precede the appearance of yaws.

LI'MON. (Hebrew.) See *Citrus medica.*

Limo'nium. (From λειμων, a green field; so called from its colour.) This name has been applied to the *Valeriana rubra,* to the *Polygonum fagopyrum,* and to the *Pyrola rotundifolia,* but more commonly to the sea-lavender, or *Statice limonium,* of Linnæus, which is said to possess astringent properties.

Limo'num. (From λειμων, a green field; so called from the colour of its unripe fruit.) The lemon-tree, or citrus medica.

LINACRE, Thomas, was born at Canterbury, about the year 1460. After studying at Oxford, he travelled to Italy, where he acquired a perfect knowledge of the Latin and Greek languages; and afterwards devoted his attention to medicine and natural philosophy, at Rome. On his return, he graduated at Oxford, and gave lectures there on physic, as well as taught the Greek language. His reputation soon became so high, that he was called to court by Henry VII. who not only entrusted him with the education of his children, but also appointed him his physician; which office he likewise enjoyed under his successor Henry VIII. He appears in this monarch's reign to have stood above all rivalship at the head of his profession, and evinced his attachment to its interests, as well as to the public good, by founding medical lectures at the two universities, and obtaining the institution in 1518, of the royal college of physicians in London. The practice of medicine was then occupied by illiterate monks and empirics, who were licensed by the bishops, whence much mischief must have arisen. A corporate body of regularly bred physicians was therefore established, in whom was vested the sole right of examining and admitting persons to practice, as well as of examining apothecaries' shops. Linacre was the first president, which office he retained during the remainder of his life, and at his death in 1524, bequeathed his house to the college. He had relinquished practice, and entered into holy orders, about five years before, being greatly afflicted with the stone, which was the cause of his dissolution. In his literary character Linacre stands eminently distinguished, having been one of the first to introduce the learning of the ancients into this country. He translated several of the most valuable works of Galen into Latin; and his style is remarkable for its purity and elegance; he had indeed devoted great time to Latin composition, on which he published a large philosophical treatise. His professional skill was universally allowed among his cotemporaries, as well as the honour and humanity, with which he exercised the medical art; and the celebrated Erasmus has bestowed upon him the highest commendation. He was buried in St. Paul's Cathedral, where a monument was afterwards erected to his memory, with a Latin inscription by Dr. Caius.

Linagro′stis. (From *λινον*, cotton, and *αγρωϛις*, grass, so called from the softness of its texture.) Cotton-grass.

Linangi′na. (From *linum*, flax, and *ango*, to strangle; so called because, if it grows among flax or hemp, it twists round it, and chokes it.) The herb dodder.

Lina′ria. (From *linum*, flax, named from the resemblance of its leaves to those of flax.) See *Antirrhinum*.

LI′NCTUS. (*Linctus*, *-us*, m. from *lingo*, to lick.) *Lohoc. Eclegma. Elexis. Elegma. Eclectos. Ecleitos. Illinctus.* Loch and lambative. A term in pharmacy, that is generally applied to a soft and somewhat oily substance, of the consistence of honey, which is licked off the spoon, it being too solid and adhesive to be taken otherwise.

LI′NEA A′LBA. (From *linum*, a thread, and *album*, white; so called from its appearance and colour.) *Linea centralis.* An aponeurosis that extends from the scrobiculus cordis straight down to the navel, and from thence to the pubes. It is formed by the tendinous fibres of the internal oblique ascending and the external oblique descending muscles, and the transversalis, interlaced with those of the opposite side.

Li′neæ semiluna′res. The lines which bound the outer margin of the recti muscles, formed by the union of the abdominal tendons.

Li′neæ transve′rsæ. Lines which cross the *recti* muscles.

LI′NGUA. (From *lingo*, to lick up.) The tongue. See *Tongue*.

Li′ngua a′vis. The seeds of the *Fraxinus*, or ash, are so called, from their supposed resemblance to a bird's tongue.

Li′ngua cani′na. So called from the resemblance of its leaves to a dog's tongue. See *Cynoglossum*.

Li′ngua cervi′na. See *Asplenium Scolopendrium*.

LINGUA′LIS. (*Lingualis*, sc. *musculus*; from *lingua*, a tongue.) *Basio-glossus*, of Cowper. A muscle of the tongue. It arises from the root of the tongue laterally, and runs forward between the hyo-glossus and genio-glossus, to be inserted into the tip of the tongue, along with part of the stylo-glossus. Its use is to contract the substance of the tongue, and to bring it backwards.

LINIMENT. (*Linimentum*; from *lino*, to anoint.) An oily substance of a mediate consistence, between an ointment and oil, but so thin as to drop.

The following are some of the most approved forms.

Linime′ntum æru′ginis. Liniment of verdigris, formerly called oxymel æruginis, mel Ægyptiacum and unguentum Ægyptiacum. "Take of verdigris, powdered, an ounce; vinegar, seven fluid-ounces; clarified honey, fourteen ounces. Dissolve the verdigris in the vinegar, and strain it through a linen cloth; having added the honey gradually, boil it down to a proper consistence."

Linime′ntum ammo′niæ subcarbona′tis. Liniment of subcarbonate of ammonia, formerly called linimentum ammoniæ and linimentum volatile. "Take of solution of subcarbonate of ammonia, a fluid-ounce; olive oil, three fluid-ounces. Shake them together until they unite." A stimulating liniment, mostly used to relieve rheumatic pains, bruises, and paralytic numbness.

Linime′ntum ammoniæ fo′rtius

Strong liniment of ammonia. "Take of solution of ammonia, a fluid-ounce; olive oil, two fluid-ounces. Shake them together until they unite." A more powerful stimulating application than the former, acting as a rubefacient. In pleurodynia, indolent tumours, stiffness of the joints, and arthritic pains, it is to be preferred to the milder one.

Linime'ntum a'quæ ca'lcis. Liniment of lime-water. "Take of lime-water, olive oil, of each eight ounces; rectified spirit of wine, one ounce. Mix." This has been long in use as an application to burns and scalds.

Linime'ntum ca'mphoræ. Camphor liniment. "Take of camphor, half an ounce; olive oil, two fluid-ounces. Dissolve the camphor in the oil." In retentions of urine, rheumatic pains, distensions of the abdomen from ascites, and tension of the skin from abcess, this is an excellent application.

Linime'ntum ca'mphoræ compo'situm. Compound camphor liniment. "Take of camphor, two ounces; solution of ammonia, six fluid-ounces; spirit of lavender, a pint. Mix the solution of ammonia with the spirit in a glass retort; then, by the heat of a slow fire, distil a pint. Lastly, in this distilled liquor dissolve the camphor." An elegant and useful stimulant application in paralytic, spasmodic, and rheumatic diseases. Also for bruises, sprains, rigidities of the joints, incipient chilblains, &c. &c.

Linime'ntum hydra'rgyri. Mercurial liniment. "Take of strong mercurial ointment, prepared lard, of each four ounces; camphor, an ounce; rectified spirit, fifteen minims; solution of ammonia, four fluid-ounces. First powder the camphor, with the addition of the spirit, then rub it with the mercurial ointment and the lard; lastly, add gradually the solution of ammonia, and mix the whole together." An excellent formula for all surgical cases, in which the object is to quicken the action of the absorbents, and gently stimulate the surfaces of parts. It is a useful application for diminishing the indurated state of particular muscles, a peculiar affection every now and then met with in practice; and it is peculiarly well calculated for lessening the stiffness and chronic thickening often noticed in the joints. If it be frequently or largely applied, it affects the mouth more rapidly than the mercurial ointment.

Linime'ntum opia'tum. A resolvent anodyne embrocation, adapted to remove indolent tumours of the joints, and those weaknesses which remain after strains, and chilblains before they break.

Linime'ntum saponis compositum. Compound soap liniment. *Linimentum saponis.* "Take of hard soap, three ounces; camphor, an ounce spirit of rosemary, a pint. Dissolve the camphor in the spirit, then add the soap, and macerate in the heat of a sand-bath, until it be melted." The basis of this form was first proposed by Riverius, and it is now commonly used under the name of opodeldoc. This is a more pleasant preparation, to rub parts affected with rheumatic pains, swellings of the joints, &c. than any of the foregoing, and at the same time not inferior, except where a rubefacient is required.

Linime'ntum sapo'nis cum o'pio. Soap liniment, with opium. "Take of compound soap liniment, six ounces; tincture of opium, two ounces. Mix." For dispersing indurations and swellings, attended with pain, but no acute inflammation.

Linime'ntum terebi'nthinæ. Turpentine liniment. "Take of resin cerate, a pound; oil of turpentine, half a pint. Add the oil of turpentine to the cerate, previously melted, and mix." This liniment is very commonly applied to burns, and was first introduced by Mr. Kentish, of Newcastle.

Linime'ntum terebi'nthinæ vitrio'licum. Vitriolic liniment of turpentine. "Take of olive oil, ten ounces; oil of turpentine, four ounces; vitriolic acid, three drachms. Mix." This preparation is said to be efficacious in chronic affections of the joints, and in the removal of long existing effects of sprains and bruises.

Liniment of ammonia. See *Linimentum ammoniæ.*

Liniment of camphor. See *Linimentum camphoræ.*

Liniment of mercury. See *Linimentum hydrargyri.*

Liniment of verdigris. See *Linimentum æruginis.*

Liniment of turpentine. See *Linimentum terebinthinæ.*

LINNÆ'A. (So named in honour of Linnæus.) The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Angiospermia.*

Linnæ'a borea'lis. The systematic name of the plant named in honour of the immortal Linnæus, which has a bitter subastringent taste, and is used in some places in the form of fomentation, to rheumatic pains, and an infusion with milk is much esteemed in Switzerland in the cure of sciatica.

LINNÆUS, Charles, was born in Sweden, in 1707. He derived at a very early age from his father, that attachment to the study of nature, by which he afterwards so eminently distinguished himself. He was intended for the church, but made so little improvement in the requisite learning, that this was soon abandoned for the profession of medicine. He appears to have had a singlar inaptitude for learning languages; though he was sufficiently versed in Latin. His scanty finances much embarrassed his progress at first; but his taste for botany at length having procured him the patronage of Dr. Celsius, professor of divinity at Upsal, he was enabled to pursue his studies to more advantage. In 1730, he was appointed to give lectures in the botanic garden, and began to compose some of those works, by which he rendered his favourite science more philosophical, and more popular than it had ever been before. Two years afterwards he was commissioned to make a tour through Lapland, of which he subsequently published an interesting account; and having learnt the art of assaying metals, he gave lectures on this subject also on his return. In 1735, he took his degree in physic at Harderwyck, and in his inaugural dissertation advanced a strange hypothesis, that intermittent fevers are owing to particles of clay, taken in with the food, obstructing the minute arteries. Soon after this his Systema Naturæ first appeared; which was greatly enlarged and improved in numerous successive editions. In Holland, he fortunately obtained the support of a Mr. Clifford, an opulent banker, whereby he was enabled to visit England also; but his great exertions afterwards impaired his health, and being attacked with a severe intermittent, he could not resist the desire, when somewhat recovered, of returning to his native country. Arriving there in 1738, he settled at Stockholm, where his reputation soon procured him some medical practice, and the appointment of physician to the navy, as well as lecturer on botany and mineralogy; a literary society was also established, of which he was the first president, and by which numerous volumes of transactions have since been published. In 1740, he was chosen professor of medicine at Upsal, having been admitted a member of that academy on his return to Sweden; he also shared with Dr. Rosen the botanical duties, and considerably improved the garden; he was afterwards made secretary, and on some public occasions did the honours of the university. He received likewise marks of distinction from several foreign societies. About the year 1746 he was appointed Archiater; and it became an object of national interest to make additions to his collection from every part of the world. A systematic treatise on the Materia Medica was published by him in 1749; and two years after his Philosophia Botanica, composed during a severe fit of the gout, in which he supposed himself to have derived great benefit from taking a large quantity of wood strawberries. This was soon followed by his great work the Species Plantarum; after which he was honoured with the order of the Polar Star, never before conferred for literary merit; and having declined a splendid invitation to Spain, he was raised to the rank of nobility. In 1763 his son was allowed to assist him in the botanical duties. About this time he published his Genera Morborum, and three years after his Clavis Medicinæ. His medical lectures, though too theoretical, were very much esteemed; but he had declined general practice on his establishment at Upsal. As he advanced in life, the fatiguing occupations, in which he was engaged, impaired his health, notwithstanding his temperate and regular habits; and at length brought on his dissolution in 1778. This was regarded as a loss to the nation, and even to the world. About ten years after a society, adopting his name, was formed in this country, which has published many valuable volumes of transactions, and the president purchased Linnæus's collections of his widow; similar institutions have also been established in other parts of the world.

Linospe'rmum. (From λινον, flax, and σπερμα, seed.) Linseed.

Linseed. The fruit of the flax plant, or linum, is much used in medicine. Its qualities are mucilaginous and oily. It is lubricating and emollient. It is employed in decoction, or infusion, in heat of urine, &c. in the form of clyster, in tenesmus; in cataplasm, in quincy, and other complaints. The proportion of the seeds in the decoction, are an ounce to a pound of water. See *Linum.*

Lint. See *Linteum.*

LI'NTEUM. Lint. A soft woolly substance, made by scraping old linen cloth, and employed in surgery as the common dressing in all cases of wounds and ulcers, either simply or covered with different unctuous substances.

LI'NUM. (From λειος, soft, smooth; so called from its soft, smooth, texture.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Pentagynia.*

2. The pharmacopœial name of the common flax. See *Linum usitatissimum.*

Li'num catha'rticum. *Linum minimum. Chamœlium.* Purging flax, or mill-mountain. This small plant, *Linum catharticum, foliis oppositis ovato-lanceolatis, caule dichotomo, corollis acutis,* of Linnæus, is an effectual and safe cathartic. It has a bitterish and disagreeable taste. A handful infused in half a pint of boiling water is the dose for an adult.

Li'num usitati'ssimum. The systematic name of the common flax. *Linum sylvestre. Linum usitatissimum; calycibus capsulisque mucronatis, petalis crenatis, foliis lanceolatis alternis, caule subsolitario,* of Linnæus. The seeds of this useful plant, called linseed, have an unctuous, mucilaginous, sweetish taste, but no remarkable smell; on expression they yield a large quantity of oil, which, when carefully drawn, without the application of heat, has no particular taste or flavour:

boiled in water, they yield a large proportion of a strong flavourless mucilage, which is in use as an emollient or demulcent in coughs, hoarsenesses, and pleuritic symptoms, that frequently prevail in catarrhal affections; and it is likewise recommended in nephritic pains and stranguries. The meal of the seeds is also much used externally, in emollient and maturating cataplasms. The expressed oil is an officinal preparation, and is supposed to be of a more healing and balsamic nature than the other oils of this class: it has, therefore, been very generally employed in pulmonary complaints, and in colics and constipations of the bowels. The cake which remains after the expression of the oil, contains the farinaceous part of the seed, and is used in fattening cattle, under the name of oil-cake.

Li'paris. (From λιπος, fat; so named from its unctuous quality.) See *Pinguicula.*

Liparoce'le. (From λιπος, fat, and κηλη, a tumour.) That species of sarcocele in which the substance constituting the disease is fat.

LIPO'MA. (From λιπος, fat.) A solitary, soft, unequal, indolent tumour, arising from a luxuriancy of adeps in the cellular membrane. The adipose structure forming the tumour is sometimes diseased towards its centre, and more fluid than the rest. At other times it does not appear to differ in any respect from adipose membrane, except in the enlargement of the cells containing the fat. These tumours are always many years before they arrive at any size.

Lipopsy'chia. (From λειπω, to leave, and ψυχη, the soul, or life.) A swoon.

LIPOTHY'MIA. (From λειπω, to leave, and θυμος, the mind.) *Deliquium animi et animæ. Defectio animi; dissolutio. Exanimatio. Syncope. Asphyxia. Virium lapsus.* The greatest degree is called *Apopsychia. Apsychia. Ecchysis.* Fainting. Dr. Cullen makes it a genus of disease under the name of Syncope, in the class *Neuroses,* order, *Adynamiæ,* which he defines the motion of the heart diminished, or at rest for some time. He distinguishes it into three species. See *Syncope.*

LIPPITU'DO. From *lippus,* blear-eyed.) *Epiphora. Xerophthalmia.* Blear-eyedness. An exudation of a puriform humour from the margin of the eye-lids. The proximate cause is a deposition of acrimony on the glandulæ meibomianæ in the margin of the eyelids. This humour in the night glues the tarsi of the eyelids together. The margins of the eyelids are red and tumefy, are irritated and excite pain. An opthalmia, fistula lachrymalis, and sometimes an ectropium, are the consequences. The species of the lippitudo are,

1. *Lippitudo infantum,* which is familiar to children, particularly of an acrimonious habit. The lippitudo of infants is mostly accompanied with tinea, or some scabby eruption, which points out that the disease originates, not from a local, but general or constitutional, affection.

2. *Lippitudo adultorum* or *senilis.* This arises from various acrimonies, and is likewise common to hard drinkers.

3. *Lippitudo venerea,* which arises from a suppressed gonorrhœa, or fluor albus, and is likewise observed in children born of parents with venereal complaints.

4. *Lippitudo scrophulosa,* which accompanies other scrophulous symptoms.

5. *Lippitudo scorbutica,* which affects the scorbutic.

Lipy'ria. (From λειπω, to leave, and πυρ, heat.) A sort of fever, where the heat is drawn to the inward parts, while the external are cold.

LIQUIDA'MBAR. (From *liquidum,* fluid, and *ambar,* a fragrant substance, generally taken for ambergris; alluding to the aromatic liquid gum which distills from this tree.) The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Polyandria.*

Liquida'mbar styraci'flua. The systematic name of the tree which affords both the liquid amber and *storax liquida,* or liquid storax. The liquid amber is a resinous juice, of a yellow colour, inclining to red, at first about the consistence of turpentine, by age hardened into a solid brittle mass. It is obtained by wounding the bark of this tree, which is described by Linnæus the *Liquidambar foliis palmato-angulatis; foliis indivisis, acutis.* The juice has a moderately pungent, warm, balsamic taste, and a very fragrant smell, not unlike that of the *Styrax calamita* heightened by a little ambergris. It is seldom used medicinally. The *Styrax liquida* is also obtained from this plant by boiling. There are two sorts distinguished by authors; the one, the purer part of the resinous matter, that rises to the surface in boiling, separated by a strainer, of the consistence of honey, tenacious like turpentine, of a reddish or ash-brown colour, moderately transparent, of an acrid unctuous taste and a fragrant smell, faintly resembling that of the solid storax, but somewhat disagreeable. The other, the more impure part which remains on the strainer, untransparent, and in smell and taste much weaker than the former. Their use is chiefly as stomachics, in the form of plaster.

Liquidambra. See *Liquidambar styraciflua.*

Liquiri'tia. (From *liquor,* juice, or from *elikoris,* Welsh.) See *Glycyrrhiza.*

Li'quor æthe'reus vitrio'licus. The liquor procured from a distillation of equal parts of sulphuric acid and spirit of wine re-distilled.

Li'quor aceta'tis ammo'niæ. See *Ammoniæ acetatis liquor.*

Li'quor aceta'tis plumbi. See *Plumbi subacetatis liquor.*

Li'quor aceta'tis plu'mbi dilu'tus. See *Plumbi subacetatis liquor dilutus.*

Li'quor alu'minis compo'situs. Compound solution of alum. "Take of alum, sulphate of zinc, of each half an ounce; boiling water, two pints. Dissolve at the same time the alum and sulphate of zinc in the water, and then strain the solution through paper."

This water was long known in our shops under the title of aqua aluminosa bateana. It is used for cleansing and healing ulcers and wounds, and for removing cutaneous eruptions, the part being bathed with it hot three or four times a-day. It is sometimes likewise employed as a collyrium; and as an injection in fluor albus and gonorrhœa, when not accompanied with virulence.

Li'quor ammo'niæ. Solution of ammonia. See *Ammonia.*

Li'quor ammo'niæ carbona'tis. See *Ammoniæ subcarbonas.*

LI'QUOR A'MNII. All that fluid which is contained in the membranaceous ovum surrounding the fœtus in utero is called by the general name of the waters, the water of the amnion, or ovum, or liquor amnii. The quantity in proportion to the size of the different parts of the ovum, is greatest by far in early pregnancy. At the time of parturition, in some cases, it amounts to or exceeds four pints; and in others it is scarcely equal to as many ounces. It is usually in the largest quantity when the child has been some time dead, or is born in a weakly state. This fluid is generally transparent, often milky, and sometimes of a yellow, or light brown colour, and very different in consistence; and these alterations seem to depend upon the state of the constitution of the parent. It does not coagulate with heat, like the serum of the blood; and, chemically examined, it is found to be composed of phlegm, earthy matter, and sea salt, in different proportions in different subjects, by which the varieties in its appearance and consistence are produced. It has been supposed to be excrementitious; but it is generally thought to be secreted from the internal surface of the ovum, and to be circulatory as in other cavities. It was formerly imagined, that the fœtus was nourished by this fluid, of which it was said to swallow some part frequently; and it was then asserted, that the qualities of the fluid were adapted for its nourishment. But there have been many examples of children born without any passage to the stomach; and a few, of children in which the head was wanting, and which have nevertheless arrived at the full size. These cases fully prove that this opinion is not just, and that there must be some other medium by which the child is nourished, besides the waters. The incontrovertible uses of this fluid are, to serve the purpose of affording a soft bed for the residence of the fœtus, to which it allows free motion, and prevents any external injury during pregnancy: and inclosed in the membranes, it procures the most gentle, yet efficacious, dilatation of the os uteri, and soft parts, at the time of parturition. Instances have been recorded, in which the waters of the ovum are said to have been voided so early as in the sixth month of pregnancy, without prejudice either to the child or parent. The truth of these reports seems to be doubtful, because, when the membranes are intentionally broken, the action of the uterus never fails to come on, when all the water is evacuated. A few cases have occurred to me, says Dr. Denman, in practice, which might have been construed to be of this kind; for there was a daily discharge of some colourless fluid from the vagina, for several months before delivery; but there being no diminution of the size of the abdomen, and the waters being regularly discharged at the time of labour, it was judged that some lymphatic vessel near the os uteri had been ruptured, and did not close again till the patient was delivered. He also met with one case, in which, after the expulsion of the placenta, there was no sanguineous discharge, but a profusion of lymph, to the quantity of several pints, in a few hours after delivery; but the patient suffered no inconvenience except from surprise.

Li'quor antimo'nii tartariza'ti. See *Antimonium tartarizatum.*

Li'quor arsenica'lis. See *Arsenic.*

Li'quor ca'lcis. See *Calx.*

Li'quor cu'pri ammonia'ti. See *Cupri ammoniati liquor.*

Li'quor fe'rri alkali'ni. See *Ferri alkalini liquor.*

Li'quor hydra'rgyri oxymuria'tis. See *Hydrargyri oxymurias.*

Li'quor minera'lis ano'dynus Hoffma'nni. Hoffman's anodyne liquor. A preparation of ether extolled as an anodyne and antispasmodic. See *Spiritus ætheris compositi.*

Li'quor pota'ssæ. See *Potassæ liquor.*

Li'quor subcarbona'tis pota'ssæ. See *Potassæ subcarbonatis liquor.*

Li'quor vola'tilis co'rnu ce'rvi. This preparation of the volatile alkali, commonly termed hartshorn, possesses the same virtues as the sub-carbonate of ammonia. It is in common use to smell at in faintings, &c. See *Ammoniæ subcarbonas.*

Liquorice. See *Glycyrrhiza.*

Liquorice, Spanish. See *Glycyrrhiza.*

LISTER, Martin, was born about 1638, of a Yorkshire family, settled in Buckinghamshire, which produced many medical practitioners of reputation; and his uncle, Sir Matthew Lister, was physician to Charles I. and president of the college. After studying at Cambridge, where he was made fellow of St. John's College, by royal mandate, he travelled to the continent for improvement. On his return, in 1670, he settled at York, where he practised for many years with considerable success. Having communicated many papers on the natural history and antiquities of the north of England to the Royal Society, he was elected a fellow of that body; and he likewise enriched the Ashmolean museum at Oxford. He came, by the solicitation of his friends, to London in 1684, having received a diploma at Oxford; and soon after was admitted a fellow of the College of Physicians. In 1698 he accompanied the embassy to France; and published an account of this journey on his return. He was made physician to Queen Anne about three years before his death, which happened in the beginning of 1712. He wrote on the English medicinal waters, on small pox, and some other diseases; but his writings, though containing some valuable practical observations, are marked by too much hypothesis, and attachment to ancient doctrines; and he particularly condemned the cooling plan of treatment in febrile diseases, introduced by the sagacious Sydenham. His reputation is principally founded on his researches in natural history and comparative anatomy, on which he published several separate works, as well as nearly forty papers in the Philosophical Transactions.

Lithago′ga. (From λιθος, a stone, and αγω, to bring away.) Medicines which expel the stone.

Litharge. See *Lithargyrus.*

Litharge plaster. See *Emplastrum lithargyri.*

Lytha′rgyrus. (From λιθος, a stone, and αργυρος, silver.) *Lithargyrum.* An oxyd of lead, in an imperfect state of vitrification. When silver is refined by cupellation with lead, this latter metal, which is scorified, and causes the scorification of the imperfect metals alloyed with the silver, is transformed into a matter composed of small semitransparent shining plates, resembling mica; which is litharge. Litharge is more or less white or red, according to the metals with which the silver is alloyed. The white is called litharge of silver; and the red has been improperly called litharge of gold. See *Lead,* and *plumbi subacetatis liquor.*

LI′THIAS. A lithiate, or salt, formed by the union of the lithic acid, or acid of the stone sometimes found in the human bladder, with different bases; thus, *lithiate of ammonia,* &c.

LITHI′ASIS. (From λιθος, a stone.)

1. The formation of stone, or gravel.
2. A tumour of the eyelid, under which is a hard concretion resembling a stone.

Lithoi′des. (From λιθος, a stone, and ειδος, a likeness; so called from its hardness.) The petrous portion of the temporal bone.

Litho′labum. (From λιθος, a stone; and λαμϐανω, to seize.) An instrument for extracting the stone from the bladder.

LITHO′LOGY. (*Lithologia*; from λιθος, a stone, and λογος, a discourse.) A discourse or treatise on stones.

Lithoma′rga. Stone marle. Fuller's earth is one of the most useful varieties of lithomarge.

LITHONTRIPTICS. (*Lithontriptica,* sc. *medicamenta*; from λιθος, a stone, and τριϐω, to bear away.) *Lithontriptics.* From the strict sense and common acceptation of the word, this class of medicine should comprehend such as possess a power of dissolving calculi in the urinary passages. It is, however, doubted by many, whether there be in nature any such substances. By this term, then, we mean those substances which possess a power of removing a disposition in the body to the formation of calculi. The researches of modern chemists have proved, that these calculi consist mostly of a peculiar acid, named the lithic or uric acid. With this substance, the alkalies are capable of uniting, and forming a soluble compound; and these are accordingly almost the sole lithontriptics. From the exhibition of alkaline remedies, the symptoms arising from stone in the bladder are very generally alleviated; and they can be given to such an extent that the urine becomes very sensibly alkaline, and is even capable of exerting a solvent power on these concretions. Their administration, however, cannot be continued to this extent for any length of time, from the irritation they produce on the stomach and urinary organs. The use, therefore, of the alkalies, as solvents, or lithontriptics, is now scarcely ever attempted; they are employed merely to prevent the increase of the concretion, and to palliate the painful symptoms, which they do apparently by preventing the generation of lithic acid, or the separation of it by the kidneys; the urine is thus rendered less irritating, and the surface of the calculus is allowed to become smooth.

When the alkalies are employed with this view, they are generally given neutralized, or with excess of carbonic acid. This renders them much less irritating. It at the same time, indeed diminishes their solvent power; for the alkaline carbonates exert no action on urinary calculi; but they are still capable of correcting that acidity in the primæ viæ, which is the cause of the deposition of the lithic acid from the urine, and therefore serve equally to palliate the disease. And when their acrimony is thus diminished, their use can be continued for any length of time.

It appears from the experiments of Fourcroy, and others, that some other ingredients of calculi, as well as the lithic acid, are dissolved by the caustic alkali, and various experiments have shown that most calculi yield to its power. It is obvious, however, that what is taken by the mouth is subject to many changes in the alimentary canal, and also the lymphatic and vascular systems: and in this way it must be exceedingly difficult to get such substances (even were they not liable to alterations) in sufficient quantity into the bladder. Indeed there are very few authenticated cases of the urine being so changed as to become a menstruum for the stone. Excepting the case of Dr. Newcombe, recorded by Dr. Whytt, the instance of Mr. Home is almost the only one. Though lithontriptics, however, may not in general dissolve the stone in the bladder, yet it is an incontrovertible fact that they frequently mitigate the pain; and, to lessen such torture as that of the stone in the bladder, is surely an object of no little importance. Lime was long ago known as a remedy for urinary calculi, and different methods were employed to administer it. One of these plans fell into the hands of a Mrs. Steevens, and her success caused great anxiety for the discovery of the secret. At last, Parliament bought the secret for the sum of 5000*l*. In many instances, stones which had been unquestionably felt were no longer to be discovered; and as the same persons were examined by surgeons of the greatest skill and eminence, both before and after the exhibition of her medicines, it was no wonder that the conclusion was drawn that the stones really were dissolved. From the cessation of such success, and from its now being known that the stones are occasionally protruded between the fasciculi of the muscular fibres of the bladder, so as to be lodged in a kind of cyst on the outside of the muscular coat, and cause no longer any grievances, surgeons of the present day are inclined to suspect that this must have happened in Mrs. Steevens's cases. This was certainly what happened in one of the cases on whom the medicine had been tried. It is evident that a stone so situated would not any longer produce irritation, but would also be quite indiscoverable by the sound, for, in fact, it is no longer in the cavity of the bladder.

As soap was, with reason, supposed to increase the virtues of the lime, it led to the use of caustic alkali, taken in mucilage, or veal broth. Take of pure potash ℥viij; of quick lime ℥iv; of distilled water, ℔ij. Mix them well together in a large bottle, and let them stand for twenty-four hours. Then pour off the ley, filter it through paper, and keep it in well stopped vials for use. Of this, the dose is from thirty drops to ʒij, which is to be repeated two or three times a-day, in a pint of veal broth, early in the morning, at noon, and in the evening. Continue this plan for three or four months, living during the course, on such things as least counteract the effect of the medicine.

The common fixed alkalies, or carbonated alkali, and the acidulous soda-water, have of late been used as lithontriptics. Honey has also been given; and Mr. Home, surgeon at the Savoy, has recorded its utility in his own and his father's cases. Bitters have likewise been tried.

Dismissing all theories, lime-water, soap, acidulous soda-water, caustic alkali, and bitters, are useful in cases of stone. Of the soap, as much may be taken as the stomach will bear, or as much as will prove gently laxative; but of the lime-water, few can take more than a pint daily.

The acidulous soda-water may be taken in larger quantities, as it is more agreeable.

There is a remedy celebrated in Holland, under the name of liquor lithontriptica loosii, which contains, according to an accurate analysis, muriate of lime. This professor Hufeland recommends in the following form:

℞ Calcis muriatæ ʒj.
Aquæ distillatæ, ℥ij. ft. solutio.

Thirty drops are to be taken four times a-day, which may be increased as far as the stomach will bear.

For curing stone patients, little reliance can be placed in any lithontriptics hitherto discovered, though they may rationally be given, with a confident hope of procuring an alleviation of the fits of pain attending the presence of stone in the bladder. After all, the only certain method of getting rid of the calculus is the operation. See *Lithotomy*.

Lithontry′ptics. (From λιθος, a stone, and θρυπτω, to break.) See *Lithontriptics*.

LITHOSPE′RMUM. (From λιθος, a stone, and σπερμα, seed; named from the hardness of its seed.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*.

2. The pharmacopœial name of common or officinal gromwell.

Lithospe′rmum officina′le. The systematic name of the officinal gromwell. The seeds of this officinal plant, *Lithospermum officinale; seminibus lævibus, corollis vix calycem superantibus, foliis lanceolatis,* of Linnæus, were formerly supposed, from their stony hardness, to be efficacious in calculous and gravelly disorders. Little credit is given to their lithontriptic character, yet they are occasionally used as diuretic for clearing the urinary passages, and for obviating strangury, in the form of emulsion.

LITHO′TOMY. (*Lithotomia*; from λιθος, a stone, and τεμνω, to cut.) *Cystomia.* The operation of cutting into the bladder, in order to extract a stone. Several methods have been recommended for performing this operation, but there are only two which can be practised with any propriety. One is, where the operation is to be performed immediately above the pubes, in that part of the bladder which is not covered with peritonæum, called the *high operation*. The other, where it is done in the perinæum, by laying open the neck and lateral part of the bladder, so as to allow of the extraction of the stone, called the *lateral operation*, from the prostate gland of the neck of the bladder being laterally cut.

Li'tron. (Corruptly written for *νιτρον*.) Nitre.

Li'tus. (From *lino*, to anoint.) A liniment.

LI'VER, ἧπαρ. *Hepar*. A large viscus, of a deep red colour, of great size and weight, situated under the diaphragm, in the right hypochondrium, its smaller portion occupying part of the epigastric region. In the human body, the liver is divided into two principal lobes, the right of which is by far the largest. They are divided on the upper side by a broad ligament, and on the other side by a considerable depression or fossa. Between and below these two lobes is a smaller lobe, called *lobulus Spigelii*. In describing this viscus, it is necessary to attend to seven principal circumstances:—its ligaments; its surfaces; its margins; its tubercles; its fissure; its sinus; and the pori biliari.

The *ligaments* of the liver are five in number, all arising from the peritonæum. 1. *The right lateral ligament*, which connects the thick right lobe with the posterior part of the diaphragm. 2. *The left lateral ligament*, which connects the convex surface and margin of the left lobe with the diaphragm, and, in those of whom the liver is very large, with the œsophagus and spleen. 3. *The broad or middle suspensory ligament*, which passes from the diaphragm into the convex surface, and separates the right lobe of the liver from the left. It descends from above through the large fissure to the concave surface, and is then distributed over the whole liver. 4. *The round ligament*, which in adults consists of the umbilical vein, indurated into a ligament. 5. *The coronary ligament*.

The liver has two *surfaces*, one superior, which is convex and smooth, and one inferior, which is concave, and has holes and depressions to receive, not only the contiguous viscera, but the vessels running into the liver.

The *margins* of the liver are also two in number; the one, which is posterior and superior is obtuse, the other, situated anteriorly and inferiorly, is acute.

The *tubercles* of the liver are likewise two in number, viz. *lobulus anonymus*, and *lobulus caudatus*, and are found near the vena portæ.

Upon looking on the concave surface of this viscus, a considerable fissure is obvious, known by the name of the *fissure of the liver*.

In order to expose the *sinus*, it is necessary to remove the gall-bladder, when a considerable sinus, before occupied by the gall-bladder, will be apparent.

The *blood-vessels* of the liver are the hepatic artery, the vena portæ, and the venæ cavæ hepaticæ, which are described under their proper names. The *absorbents* of the liver are very numerous. The liver has *nerves* from the great intercostal and eighth pair, which arise from the hepatic plexus, and proceed along with the hepatic artery and vena portæ into the substance of the liver. With regard to the substance of the liver, various opinions have been entertained. It is, however, now pretty well ascertained to be a large gland, composed of lesser glands connected together by cellular structure. The small glands which thus compose the substance of the liver, are termed penicilli, from the arrangement of the minute ramifications of the vena portæ composing each gland, resembling that of the hairs of a pencil. The chief use of this large viscus is to supply a fluid, named bile, to the intestines, which is of the utmost importance in chylification. The small penicilli perform this function by a specific action on the blood they contain, by which they secrete in their very minute ends the fluid termed *hepatic bile*; but whether they pour it into what is called a follicle, or not, is yet undecided, and is the cause of the difference of opinion respecting the substance of the liver. If it be secreted into a follicle, the substance is truly glandular, according to the notion of the older anatomists: but if it be secreted merely into a small vessel, called a biliary pore (whose existence can be demonstrated,) corresponding to the end of each of the penicilli, without any intervening follicle, its substance is then, in their opinion, vascular. According to our notions in the present day, in either case, the liver is said to be glandular; for we have the idea of a gland when any arrangement of vessels performs the office of separating from the blood a fluid or substance different in its nature from the blood. The small vessels which receive the bile secreted by the penicilli, are called *pori biliarii*; these converge together throughout the substance of the liver towards its under surface, and, at length, form one trunk, called *ductus hepaticus*, which conveys the bile into either the *ductus communis choledochus*, or *ductus cysticus*. See *Gall bladder*.

Liver, acute inflammation of the. See *Hepatitis*.

Liver of sulphur. See *Sulphuret*.

Liver-wort. See *Marchantia polymorpha*.

Liver-wort, ash-coloured. See *Lichen caninus*.

Liver-wort, ground. See *Lichen caninus*.

Liver-wort, Iceland. See *Lichen islandicus*.

Liver-wort, noble. See *Marchantia polymorpha.*

Li′vor. (From *liveo*, to be black and blue.) A blackish mark on the body, from a blow. A dark circle under the eye.

Lix. (From λις, light.) Pot-ash. Wood-ash.

Lixi′via vitriola′ta sulphu′rea. An impure sulphate of potash.

LIX′IVIAL. Those salts are called lixivial which have been extracted by lixiviation, and these chiefly are fixed alkalies; which are therefore called lixivial salts.

LIXIVIATION. *Lessive.* The process employed by chemists of dissolving, by means of warm water, the saline and soluble particles of cinders, the residues of distillation and combustion, coals and natural earths, in order to obtain those particles which are termed *lixivial salts.*

LIXI′VIUM. (From *lix*, wood-ash.) The liquor in which saline and soluble particles of the residues of distillation and combustion are dissolved.

Lixi′vium sapona′rium. See *Potassæ liquor.*

Lixi′vium ta′rtari. See *Potassæ subcarbonatis liquor.*

LOBB, Theophilus, practised as a physician in London with considerable reputation, and left several works on medical topics. He died in 1763, in the 85th year of his age. He wrote on fevers, small-pox, and some other diseases; but his most celebrated publication was, " A Treatise on Solvents of the Stone, and on curing the Stone and the Gout by Aliments," which passed through several editions, and was translated into Latin and French; he considered the morbid matter of an alkaline nature, and vegetable acids as the remedy. He was author also of " A Compendium of the Practice of Physic," and of several papers in the Gentleman's Magazine.

LOBE′LIA. (Named in honour of Lobel, a botanist.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Monogamia.*

2. The pharmacopœial name of the blue lobelia, or cardinal flower.

Lobe′lia syphili′tica. The systematic name of the blue lobelia of the pharmacopæias. The root is the part directed by the Edinburgh Pharmacopœia for medicinal use; in taste it resembles tobacco, and is apt to excite vomiting. It derived the name of *syphilitica* from its efficacy in the cure of syphilis, as experienced by the North American Indians, who considered it as a specific in that disease, and with whom it was long an important secret, which was purchased by Sir William Johnson, and since published by different authors. The method of employing this medicine is stated as follows: A decoction is made of a handful of the roots in three measures of water. Of this half a measure is taken in the morning fasting, and repeated in the evening; and the dose is gradually increased, till its purgative effects become too violent, when the decoction is to be intermitted for a day or two, and then renewed, until a perfect cure is effected. During the use of this medicine, a proper regimen is to be enjoined, and the ulcers are also to be frequently washed with the decoction, or, if deep and foul, to be sprinkled with the powder of the inner bark of the New Jersey tea-tree. *Ceanothus Americanus.* Although the plant thus used is said to cure the disease in a very short time, yet it is not found that the antisyphilitic powers of the lobelia have been confirmed in any instance of European practice.

LO′BULUS. (Dim. of *lobus*, a lobe.) A small lobe.

Lo′bulus accesso′rius. See *Lobulus anonymus.*

LO′BULUS ANO′NYMUS. *Lobulus accessorius anterior-quadratus.* The anterior point of the right lobe of the liver. Others define it to be that space of the great lobe betwixt the fossa for the umbilical vein and gall-bladder, and extending forward from the fossa for the lodgment of the vena portæ, to the anterior margin of the liver.

Lo′bulus cauda′tus. *Processus caudatus.* A tail-like process of the liver, stretching downward from the middle of the great right lobe to the lobulus spigelii. It is behind the gall-bladder and betwixt the fossa venæ portarum, and the fissure for the lodgment of the vena cava.

LO′BULUS SPIGE′LII. *Lobulus posterior.* L. *posticus papillatus.* The lobulus spigelii is betwixt the two greater lobes, but rather belonging to the right great lobe. From its situation deep behind, and from its having a perpendicular papilla-like projection, it is called lobulus posterior, or papillatus. To the left side it has the fissure for the lodgment of the ductus venosus; on the right, the fissure for the vena cava; and above, it has the great transverse fissure of the liver, for the lodgment of the cylinder of the porta; obliquely to the right, and upwards, it has a connection with the lower concave surface of the great lobe, by the processus caudatus, which Winslow calls one of the roots of the lobulus spigelii. It is received into the bosom of the lesser curve of the stomach.

LOCA′LES. The fourth class of Cullen's Nosology, which comprehends morbid affections that are partial, and includes eight orders, viz. dysæsthesiæ, dysorexiæ, dyscinesiæ, apocenoses, epischeses, tumores, ectopia, and dialyses.

Loca′lis membra′na. The pia mater.

LO′CHIA. (From λοχευω, to bring forth.) The cleansings. The serous, and for the most part green-coloured, discharge that takes place from the uterus and vagina of women, during the first four days after delivery.

LOCHIORRHŒ′A. (From λοχια, and ῥεω, to flow.) An excessive discharge of the lochia.

Locked jaw. See *Tetanus.*

Logwood. See *Hæmatoxylon campechianum.*

LOMMIUS, Jodocus, was born in Guelderland, about the commencement of the 16th century. Having received from his father a good classical education, he turned his attention to medicine, which he studied chiefly at Paris. He practised for a considerable time at Tournay, where he was pensionary-physician in 1557; and three years after he removed to Brussels. The period of his death is not known. He left three small works, which are still valued from the purity and elegance of their Latinity: a Commentary on Celsus; Medicinal Observations in Three Books; and a Treatise on the Cure of continued Fevers; the two latter have been several times reprinted and translated.

Lonchi′tis. (From λογχη, a lance; so named because the leaves resemble the head of a lance.) The herb spleenwort.

Longa′num. (From *longus*, long; so named from its length.) The intestinum rectum.

Longing. A disease peculiar to the female, and only during pregnancy, and those states in which the uterine discharge is suppressed.

LONGI′SSIMUS DO′RSI. *Lumbo dorso trachelien*, of Dumas. This muscle, which is somewhat thicker than the sacro-lumbalis, greatly resembles it, however, in its shape and extent, and arises, in common with that muscle, between it and the spine. It ascends upwards along the spine, and is inserted by small double tendons into the posterior and inferior part of all the transverse processes of the vertebræ of the back, and sometimes of the last vertebra of the neck. From its outside it sends off several bundles of fleshy fibres, interspersed with a few tendinous filaments, which are usually inserted into the lower edge of the ten uppermost ribs, not far from their tubercles. In some subjects, however, they are found inserted into a less number, and in others, though more rarely, into every one of the ribs. Towards the upper part of this muscle is observed a broad and thin portion of fleshy fibres, which cross and intimately adhere to the fibres of the longissimus dorsi. This portion arises from the upper and posterior part of the transverse processes of the five or six uppermost vertebræ of the back, by as many tendinous origins, and is usually inserted by six tendinous and fleshy slips, into the transverse processes of the six inferior vertebræ of the neck. This portion is described, by Winslow and Albinus, as a distinct muscle; by the former, under the name of *transversalis major colli*, and by the latter, under that of *transversalis cervicis*. But its fibres are so intimately connected with those of the longissimus dorsi, that it may very properly be considered as an appendage to the latter. The use of this muscle is to extend the vertebræ of the back, and to keep the trunk of the body erect; by means of its appendage, it likewise serves to turn the neck obliquely backwards, and a little to one side.

Longi′ssimus ma′nus. The flexor tertii internodii pollicis.

Longi′ssimus o′culi. The obliquus major oculi.

LONGITUDINAL SINUS. Longitudinal sinus of the dura mater. A triangular canal, proceeding in the falciform process of the dura mater, immediately under the bones of the skull, from the crista galli to the tentorium, where it branches into the lateral sinusses. The longitudinal sinus has a number of trabeculæ or fibres crossing it. Its use is to receive the blood from the veins of the pia mater, and convey it into the lateral sinusses, to be carried through the internal jugulars to the heart.

LO′NGUS CO′LLI. *Pre dorso cervical*, of Dumas. This is a pretty considerable muscle, situated close to the anterior and lateral part of the vertebræ of the neck. Its outer edge is in part covered by the rectus internus major. It arises tendinous and fleshy within the thorax, from the bodies of the three superior vertebræ of the back, laterally; from the bottom and fore-part of the transverse processes of the first and second vertebræ of the back, and of the last vertebra of the neck: and likewise from the upper and anterior points of the transverse processes of the sixth, fifth, fourth, and third vertebræ of the neck, by as many small distinct tendons; and is inserted tendinous into the fore-part of the second vertebra of the neck, near its fellow. This muscle, when it acts singly, moves the neck to one side; but, when both act, the neck is brought directly forwards.

LONI′CERA. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*.

Loni′cera diervi′lla. The systematic name of a species of honey-suckle. *Diervilla*. The young branches of this species, *Lonicera diervilla; racemis terminalibus, foliis serratis*, of Linnæus, are employed in North America as a certain remedy in gonorrhœa and suppression of urine. It has not yet been exhibited in Europe.

Loni′cera pericli′menum. Honeysuckle. This beautiful and common plant was formerly used in the cure of asthma, for cleansing sordid ulcers, and removing diseases of the skin, virtues it does not now appear to possess.

Looseness. See *Diarrhœa.*

Lo'pez ra'dix. *Radix lopeziana. Radix indica lopeziana.* The root of an unknown tree, growing, according to some, at Goa. It is met with in pieces of different thickness, some at least of two inches diameter. The woody part is whitish, and very light; softer, more spongy, and whiter next the bark, including a denser, somewhat reddish, medullary part. The bark is rough, wrinkled, brown, soft, and, as it were, woolly, pretty thick, covered with a thin paler cuticle. Neither the woody nor cortical part has any remarkable smell or taste, nor any appearance of resinous matter. It appears that this medicine has been remarkably effectual in stopping colliquative diarrhœas, which had resisted the usual remedies. Those attending the last stage of consumptions were particularly relieved by its use. It seemed to act, not by an astringent power, but by a faculty of restraining and appeasing spasmodic and inordinate motions of the intestines. Dr. Gaubius, who gives this account, compares its action to that of Simarouba, but thinks it more efficacious than this medicine.

Lopez-root. See *Lopez radix.*

Lopezia'na ra'dix. See *Lopez radix.*

Lopha'dia. (From λοφος, the hinder part of the neck.) *Lophia.* The first vertebræ of the neck.

Lordo'sis. (From λορδος, curved, bent.) An affection of the spine, in which it is bent inwards.

Lo'rica. (From *lorico*, to crust over.) A kind of lute, with which vessels are coated before they are put into the fire.

Lorica'tion. Coating. Nicholson recommends the following composition for the coating of glass vessels, to prevent their breaking when exposed to heat. Take of sand and clay, equal parts; make them into a thin paste, with fresh blood, prevented from coagulating by agitation, till it is cold, and diluted with water; add to this some hair, and powdered glass; with a brush, dipped in this mixture, besmear the glass; and when this layer is dry, let the same operation be repeated twice, or oftener, till the coat applied is about one-third part of an inch in thickness.

Lo'rind matri'cis. An epilepsy, or a convulsive disorder, proceeding from the uterus.

LORRY, Anne-Charles, was born near Paris in 1725. He studied and practised as a physician, with unremitting zeal and peculiar modesty, and obtained a high reputation. At 23 he was admitted doctor of medicine at Paris, and subsequently became doctor-regent of the faculty. He was author of several works, some of which still maintain their value; particularly his treatise on Cutaneous Diseases, which combines much erudition and accurate observation, with great clearness of arrangement, and perspicuity of language. He died in 1783.

Loss of Appetite. See *Anorexia.*

LOTION. (*Lotio*; from *lavo*, to wash.) An external fluid application. Lotions are usually applied by wetting linen in them, and keeping it on the part affected.

LO'TUS. (From λω, to desire.) 1. A tree whose fruit was said to be so delicious as to make those who tasted it to forsake all other desires: hence the proverb Λωτον εφαγον, *lotum gustavi:* I have tasted lotus.

2. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

LOUIS, Anthony, was born at Metz in 1723. He attained great reputation as a surgeon, and was honoured with numerous appointments, and marks of distinction, as well in his own, as by foreign countries. He wrote the surgical part of the "Encyclopedie," and presented several interesting papers to the Royal Academy of Surgery, of which he was secretary: besides which, he was author of several works on anatomical, medical, and other subjects. In a memoir on the legitimacy of retarded births, he maintains that the detention of the fœtus more than ten days beyond the ninth month is physically impossible.

Lousy disease. A general corruption of the humours, in consequence of which these insects are bred in ulcers, and cover the whole body.

Love-apple. The fruit of the *Solanum lycopersicum*, of Linnæus. It is so much esteemed by the Portuguese and the Spaniards, that it is an ingredient in almost all their soups and sauces, and is deemed cooling and nutritive.

Lovage. See *Ligusticum Levisticum.*

LOWER, Richard, was born in Cornwall about the year 1631. He graduated at Oxford, and having materially assisted the celebrated Dr. Willis in his dissections, he was introduced into practice by that physician. In 1665 he published a defence of Willis's work on Fevers, displaying much learning and ingenuity. But his most important performance was entitled, "Tractatus de Corde, item de motu et calore Sanguinis, et Chyli in eum transitu," printed four years after. He demonstrated the dependance of the motions of the heart upon the nervous influence, and referred the red colour of arterial blood to the action of the air in the lungs; he also gave an account of his experiments, made at Oxford in February 1665, on the transfusion of blood from one living animal to another, of which an abstract had before appeared in the Philosophical Transactions. He afterwards practised this upon an insane person, before the Royal Society, of which he was admitted a fellow in 1667, as well as of the

College of Physicians. The reputation acquired by these and some other minor publications procured him extensive practice, particularly after the death of Dr. Willis: but his political opinions brought him into discredit at court, and he declined considerably before the close of his life in 1691. The operation of transfusion was soon exploded, experience having shown that it was attended with pernicious consequences.

Loxa'rthros. (From λοξος, oblique, and *αρθρον*, a joint.) An obliquity of the joint, without spasm or luxation.

Lu'dus helmo'ntii. The waxen vein, called also ludus paracelsi. A stony matter said to be serviceable in calculus.

LUDWIG, Christian Theophilus, was born in Silesia in 1709, and educated for the medical profession. Having a strong bias towards natural history, he went on an expedition to the north of Africa: and soon after his return, in 1733, he became professor of medicine at Leipsic. The first thesis defended there under his presidency related to the manner in which marine plants are nourished; which he showed not to be by the root, as is the case in the generality of the vegetable kingdom. He afterwards published several botanical works, in which he finds many objections to the Linnæan arrangement, rather preferring that of Rivinus; but on very unsatisfactory grounds. Elementary works were likewise written by him on the different branches of medical knowledge. A more important work is entitled "Adversaria Medico-practica," in three octavo volumes. He has given an account of his trials of Stramonium and Belladonna in epilepsy, by no means favourable to either. He died in 1773.

Lu'es dei'fica. One of the pompous names for epilepsy.

Lu'es neuro'des convulsi'va. A mild typhus fever.

LU'ES VENE'REA. (From λυω, to dissolve, because it produces dissolution; and *venerea*, from *Venus*, because it is propagated by acts of venery.) The plague of Venus, or the venereal disease. Dr. Cullen calls it *syphilis*. It has also been called the venereal pestilence, or pox. *Aphrodisius morbus. Morbus gallicus. Indicus morbus. Neapolitanus morbus. Patursa.* See *Syphilis* and *Gonorrhœa*.

LUISINUS, Louis, was born at Udina, where he obtained considerable reputation about the middle of the 16th century. He translated Hippocrates's aphorisms into Latin hexameters; and published a treatise on regulating the affections of the mind by moral philosophy and the medical art: but his most celebrated work is entitled "Aphrodisiacus," printed at Venice, in two folio volumes: the first containing an account of preceding treatises on syphilis, the second comprehended principally the manuscript works on the subject, which had not then been committed to the press.

LU'JULA. (Corrupted or contracted from *Allelujah, Praise the Lord*; so called from its many virtues.) See *Oxalis acetosella*.

LUMBA'GO. (From *lumbus*, the loin.) A rheumatic affection of the muscles about the loins.

Lumba'go psoa'dica. *Lumbago apostematosa. Lumbago ab arthrocace.* Pains in the loins from abscess.

Lumba'res arte'riæ. The lumbal arteries.

Lumba'res ne'rvi. The lumbal nerve

Lumba'res ve'næ. The lumbal veins.

Lumba'ris exte'rnus. See *Quadratus lumborum*.

Lumba'ris inte'rnus. See *Psoas magnus*.

LUMBAR ABSCESS. *Psoas abscess.* A species of *arthropuosis*, that receives its name from the situation in which the matter is found, namely, upon the side of the psoas muscle, or betwixt that and the iliacus internus. Between these muscles, there lies a quantity of loose cellular membrane, in which an inflammation often takes place, either spontaneously or from mechanical injuries. This terminates in an abscess that can procure no outlet but by a circuitous course, in which it generally produces irreparable mischief, without any violent symptoms occuring to alarm the patient. The abscess sometimes forms a swelling above Poupart's ligament; sometimes below it; and frequently the matter glides under the fascia of the thigh. Occasionally, it makes its way through the sacro-ischiatic foramen, and assumes rather the appearance of a fistula in ano. The uneasiness in the loins, and the impulse communicated to the tumour by coughing, evince that the disease arises in the lumbar region; but it must be confessed, that we can hardly ever know the existence of the disorder, before the tumour, by presenting itself externally, leads us to such information. The lumbar abscess is sometimes connected with diseased vertebræ, which may either be a cause or effect of the collection of matter. The disease, however, is frequently unattended with this complication.

The situation of the symptoms of lumbar abscess renders this affection liable to be mistaken for some other, viz. lumbago and nephritic pains, and, towards its termination, for crural or femoral hernia. The first, however, is not attended with the shivering that occurs here; and nephritic complaints are generally discoverable by attention to the state of the urine. The distinction from crural hernia is more difficult. In both, a soft inelastic swelling is felt in the same situation: but in hernia, it is attended with obstructed fæces, vomiting, &c. and its appearance is always sudden, while the lumbar tumour is preceded by various complaints before its appearance in the thigh. In a horizontal posture, the abscess also totally disappears, while the hernia does not.

Lumbar region. The loins.

LUMBRICA'LES MA'NUS. (*Lumbricales*, sc. *musculi;* from their resemblance to the *lumbricus*, or earth-worm.) *Fidicinales. Flexor primi internodii digitorum manus, vel perforatus lumbricalis*, of Cowper. *Anuli tendino-phalangiens*, of Dumas. The four small flexors of the fingers which assist the bending of the fingers when the long flexors are in full action. They arise thin and fleshy from the outside of the tendons of the flexor profundus, a little above the lower edge of the carpal ligaments, and are inserted by long slender tendons into the outer sides of the broad tendons of the interosseal muscles about the middle of the first joint of the fingers.

LUMBRICA'LES PE'DIS. *Planti-tendino-phalangien*, of Dumas. Four muscles like the former, that increase the flexion of the toes, and draw them inwards.

LUMBRI'CUS. (*à lubricitate;* from its slipperiness.) *Ascaris lumbricoides. Lumbricus teres.* The long round worm. A species of worm which inhabits occasionally the human intestines. It has three nipples at its head, and a triangular mouth in its middle. Its length is from four to twelve inches, and its thickness, when twelve inches long, about that of a goose-quill. They are sometimes solitary, at other times very numerous.

Lumbri'cus terre'stris. See *Earth-worm.*

Lu'mbus ve'neris. See *Achillea millefolium.*

Lu'na. (So named from its resemblance in brightness to the moon.) The old alchemistical name of silver.

Lunar caustic. See *Argenti nitras.*

LUNA'RE OS. One of the bones of the wrist.

Luna'tica ischu'ria. (From *luna*, the moon.) A suppression of urine which returns monthly. It is noticed by Sauvages.

LUNG. *Pulmo.* The lungs are two viscera situated in the chest, by means of which we breathe. The lung in the right cavity of the chest is divided into three lobes, that in the left cavity into two. They hang in the chest, attached at their superior part to the neck, by means of the trachea, and are separated by the mediastinum. They are also attached to the heart by means of the pulmonary vessels. The substance of the lungs is of four kinds, viz. vesicular, vascular, bronchial, and parenchymatous. The vesicular substance is composed of the air-cells. The vascular invests those cells like a net-work. The bronchial is formed by the ramifications of the bronchia throughout the lungs, having the air cells at their extremities: and the spongy substance that connects these parts is termed the *parenchyma.* The lungs are covered with a fine membrane, a reflection of the pleura, called *pleura pulmonalis.* The internal surface of the air-cells is covered with a very fine, delicate and sensible membrane, which is continued from the larynx through the trachea and bronchia. The arteries of the lungs are the bronchial, a branch of the aorta, which carries blood to the lungs for their nourishment; and the pulmonary, which circulates the blood through the air-cells to undergo a certain change. The pulmonary veins return the blood that has undergone this change, by four trunks, into the left auricle of the heart. The bronchial veins terminate in the vena azygos. The nerves of the lungs are from the eighth pair and great intercostal. The absorbents are of two orders; the superficial, and deep-seated: the former are more readily detected than the latter. The glands of these viscera are called bronchial. They are muciparous, and situated about the bronchia. See *Respiration.*

Lung-wort, spotted. See *Pulmonaria officinalis.*

LU'PIA. (From λυπεω, to molest.) A genus of disease, including encysted tumours, whose contents are very thick, and sometimes solid, as *meliceris, atheroma, steatoma.* and *ganglion.*

Lupi'nus. (From λυπη, grief, or dislike; so called from its extreme bitterness.) Under this term the white lupin is directed in some pharmacopœias. The seed, the ordinary food of mankind in the days of Galen and Pliny, is now forgotten. Its farinaceous and bitter meal is occasionally exhibited to remove worms from the intestines, and made into poultices to resolve indolent tumours.

Lupi'nus a'lbus. The systematic name of the white lupin. See *Lupinus.*

LU'PULUS. (From λυπη, dislike: so named from its bitternes.) See *Humulus.*

LU'PUS. The wolf, so named from its rapacity. The cancer is also so called, because it eats away the flesh like a wolf.

Lustra'go. (From *lustro*, to expiate; so called because it was used in the antient purifications.) Flat or base vervain.

Lute. See *Lutum.*

Lu'tea co'rpora. See *Corpus luteum.*

Lute'ola. (From *lutum*, mud, because it grows in muddy places, or is of the colour of mud.) *Struthium.* Dyer's weed. Dioscorides recommends it as useful in jaundice, but it is now neglected.

LU'TUM. (From λυτος, soluble.) *Cæmentum.* Mud. Lute. A composition with which chemical vessels are covered, to preserve them from the violence of the fire, and to close exactly their joinings to each other, to retain the substances which they contain when they are volatile and reduced to vapour.

LUXATION. (*Luxatura;* from *luxo*, to put out of joint.) A dislocation of a bone from its proper cavity.

Lyca'nche. (From λυκος, a wolf, and αγχω, to strangle.) A species of quincy, in which the patient makes a noise like the howling of a wolf.

Lycanthro'pia. (From λυκος, a wolf, and ανθρωπος, a man.) A species of insanity, in which the patients leave their houses in the night, and wander about like wolves, in unfrequented places.

Ly'chnis. (From λυχνος, a torch; because the antients used its leaves rolled up for torches.) A name of several vegetable productions.

Lyco'ctonum. (From λυκος, a wolf, and κτεινω, to slay; so called because it was the custom of hunters to secrete it in raw flesh, for the purpose of destroying wolves.

LYCOPE'RDON. (From λυκος, a wolf, and περδω, to break wind: so named because it was supposed to spring from the dung of wolves.)

1. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Fungi*.

2. The pharmacopœial name of the puff-ball. See *Lycoperdon bovista*.

Lycope'rdon bovi'sta. The systematic name of the puff-ball. *Crepitus lupi*. A round or egg-shaped fungus, the *Lycoperdon bovista, subrotundum, lacerato dehiscens*, of Linnæus; when fresh, of a white colour, with a very short, or scarcely any pedicle, growing in dry pasture grounds. When young, it is sometimes covered with tubercles on the outside, and is pulpy within. By age it becomes smooth externally, and dries internally into a very fine, light, brownish dust, which is used by the common people to stop hæmorrhages. See *Lycoperdon*.

Lycope'rdon tu'ber. The systematic name of the truffle. *Tuber cibarium*, of Dr. Withering. A solid fungus of a globular figure, which grows under the surface of the ground without any roots or the access of light, and attains a size from a pea to the largest potatoe. It has a rough, blackish coat, and is destitute of fibres. Cooks are well acquainted with its use and qualities. It is found in woods and pastures in some parts of Kent, but is not very common in England. In France and Spain, truffles are very frequent, and grow to a much larger size than they do here. In these places the peasants find it worth their while to search for them, and they train up dogs and swine for this purpose, who after they have been inured to their smell by their masters frequently placing them in their way, will readily scrape them up as they ramble the fields and woods.

Lycope'rsicum. (From λυκος, a wolf, and περσικον, a peach; so called from its exciting a violent degree of lust.) Wolf's peach. Poisonous.

LYCOPO'DIUM. (From λυκος, a wolf, and πους, a foot; so called from its supposed resemblance.)

1. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Musci*.

2. The pharmacopœial name of the club-moss. See *Lycopodium clavatum*.

Lycopo'dium clava'tum. The systematic name of the club-moss. Wolf's claw. This plant, *muscus clavatus*, affords a great quantity of pollen, which is much esteemed in some places to sprinkle on young children, to prevent, and in the curing parts which are fretting. A decoction of the herb is said to be a specific in the cure of the plica polonica.

Lycopo'dium se'lago. The systematic name of the upright club-moss. *Muscus erectus*. The decoction of this plant acts violently as a vomit and a purgative, and was formerly on that account employed to produce abortions.

Lyco'psis. (From λυκος, a wolf, and οψις, an aspect; so called from its being of the colour of a wolf.) Echium Ægyptiacum, or wall-bugloss.

LY'COPUS. (From λυκος, a wolf, and πους, a foot; so named from its likeness.) The name of a genus of plants in the Linnæan system. Class, *Diandria*. Order, *Monogynia*. Wolf's-claw, or water horehound. The Lycopus europeus is sometimes used as an astringent.

Lygi'smus. (From λυγιζω, to distort.) A dislocation.

Ly'gus. (From λυγιζω, to bend; so called from its flexibility.) The agnus castus.

LYMPH. *Lympha*. The liquid contained in the lymphatic vessels. It has a fatuous smell, no taste, and is of a crystalline colour. Its specific gravity is greater than water; in consistence, it is thin and somewhat viscid. The quantity in the human body appears to be very great, as the system of the lymphatic vessels forms no small part of it. Its constituent principles appear to be albuminous water and a little salt. The lymphatic vessels absorb this fluid from the tela cellulosa of the whole body, from all the viscera and the cavities of the viscera; and convey it to the thoracic duct, where it is mixed with the chyle.

The use of the lymph is to return the superfluous nutritious jelly from every part, and to mix it with the chyle in the thoracic duct, there to be further converted into the nature of the animal; and lastly, it has mixed with it the superfluous aqueous vapour, which is effused into the cavities of the cranium, thorax, abdomen, &c.

LYMPHATIC GLANDS. *Glandulæ lymphaticæ.* See *Conglobate gland.*

LYMPHATICS. Absorbent vessels, that carry a transparent fluid, or lymph. They are small and transparent, and originate in every part of the body. With the lacteal vessels of the intestines, they form what is termed the *absorbent system.* Their termination is in the thoracic duct. See *Absorbents, Lacteals,* and *Thoracic duct.*

Lymphatics of the head and neck. — Absorbents are found on the scalp and about the viscera of the neck, which unite into a considerable *branch,* that accompanies the jugular vein. Absorbents have not been detected in the human brain: yet there can be no doubt of there being such vessels: it is probable that they pass out of the cranium through the canalis caroticus and foramen lacerum in basi cranii, on each side, and join the above *jugular branch,* which passes through some glands as it proceeds into the chest to the angle of the subclavian and jugular veins.

The absorbents from the right side of the head and neck, and from the right arm, do not run across the neck, to unite with the great trunk of the system; they have an equal opportunity of dropping their contents into the angle betwixt the right subclavian and the jugular vein. These vessels then uniting, form a trunk, which is little more than an inch, nay, sometimes not a quarter of an inch, in length, but which has nearly as great a diameter as the proper trunk of the left side.

This vessel lies upon the right subclavian vein, and receives a very considerable number of lymphatic vessels; not only does it receive the lymphatics from the right side of the head, thyroid gland, neck, &c. and the lymphatics of the arm, but it receives also those from the right side of the thorax and diaphragm, from the lungs of this side, and from the parts supplied by the mammary artery. Both in this and in the great trunk, there are many valves.

Lymphatics of the upper extremities. — The absorbents of the upper extremities are divided into superficial and deep-seated. The *superficial absorbents* ascend under the skin of the hand in every direction to the wrist, from whence a *branch* proceeds upon the posterior surface of the fore-arm to the head of the radius, over the internal condyle of the humerus, up to the axilla, receiving several branches as it proceeds. Another *branch* proceeds from the wrist along the anterior part of the fore-arm, and forms a *net-work,* with a *branch* coming over the ulna from the posterior part, and ascends on the inside of the humerus to the glands of the axilla. The *deep-seated absorbents* accompany the larger blood-vessels, and pass through two glands about the middle of the humerus, and ascend to the glands of the axilla. The superficial and deep-seated absorbents having passed through the axillary glands, form *two trunks,* which unite into *one,* to be inserted with the jugular absorbents into the thoracic duct, at the angle formed by the union of the subclavian with the jugular vein.

Lymphatics of the inferior extremities. — These are also superficial and deep-seated. The *superficial ones* lie between the skin and muscles. Those of the toes and foot form a *branch,* which ascends upon the back of the foot, over the tendon of the cruræus anticus, forms with other branches *a plexus* above the ancles, then proceeds along the tibia over the knee, sometimes passes through a gland, and proceeds up the inside of the thigh, to the subinguinal glands. The *deep-seated* absorbents follow the course of the arteries, and accompany the femoral artery, in which course they pass through some glands in the leg and above the knee, and then proceed to some deep-seated subinguinal glands. The absorbents from about the external parts of the pubes, as the penis and perineum, and from the external parts of the pelvis, in general, proceed to the inguinal glands. The subinguinal and inguinal glands send forth several branches, which pass through the abdominal ring into the cavity of the abdomen.

Lymphatics of the abdominal and thoracic viscera. — The absorbents of the lower extremities accompany the external iliac artery, where they are joined by many branches from the *uterus, urinary bladder, spermatic chord,* and some branches accompanying the internal iliac artery; they then ascend to the sacrum, where they form a *plexus,* which proceeds over the psoas muscles, and meeting with the lacteals of the mesentery, form the thoracic duct, or trunk of the absorbents, which is of a serpentine form, about the size of a crow-quill, and runs up the dorsal vertebræ, through the posterior opening of the diaphragm, between the aorta and vena azygos, to the angle formed by the union of the left subclavian and jugular veins. In this course it receives: — *the absorbents of the kidneys,* which are superficial and deep-seated, and unite as they proceed towards the thoracic duct: and *the absorbments of the spleen,* which are upon its peritoneal coat, and unite with those of the pancreas: — a *branch* from a plexus of vessels passing above and below the duodenum, and formed by the absorbents of the *stomach,* which come from the lesser and greater curvature, and are united about the pylorus with those of the pancreas and liver, which converge from the external surface and internal parts towards the portæ of the liver, and also by several branches from the *gall-bladder.*

Use of Lymphatics. — The office of these vessels is to take up substances which are applied to their mouths; thus the vapour of circumscribed cavities, and of the cells of the cellular membrane, are removed by the lymphatics of those parts; and thus mercury and other substances are taken into the system when rubbed on the skin.

The principle by which this absorption takes place, is a power inherent in the mouths of absorbing vessels, a vis insita, dependent on the high degree of irritability of their internal membrane by which the vessels contract and propel the fluid forwards. Hence the use of this function appears to be of the utmost importance, viz. to supply the blood with chyle; to remove the superfluous vapour of circumscribed cavities, otherwise dropsies, as hydrocephalus, hydrothorax, hydrocardia, ascites, hydrocele, &c. would constantly be taking place: to remove the superflous vapour from the cells of the cellular membrane dispersed throughout every part of the body, that anasarca may not take place: to remove the hard and soft parts of the body, and to convey into the system medicines which are applied to the surface of the body.

Lypo'ma. See *Lipoma.*

LY'RA. (From λυρα, a lyre, or musical instrument.) *Psalterium.* The triangular medullary space between the posterior crura of the fornix of the cerebrum, which is marked with prominent medullary fibres that give the appearance of a lyre.

Ly'rus. (From *lyra*, the lyre; so called because its leaves are divided like the strings of a lyre.) The *doronicum Germanicum*, or German leopard's-bane.

Lysigy'ia. (From λυω, to loosen, and γυιον, a member.) The relaxation of limbs.

LYSIMA'CHIA. (From *Lysimachus*, who first discovered it.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Lysima'chia nummula'ria. The systematic name of the money-wort. *Nummularia. Hirundinaria. Centimorbia.* Money-wort. This plant is very common in our ditches. It was formerly accounted vulnerary; it possesses antiscorbutic and restringent qualities. Boerhaave looks upon it as similar to a mixture of scurvy-grass with sorrel.

Lysima'chia purpu'rea. See *Lythrum salicaria.*

Lyssode'ctus. (From λυσσα, canine madness, and δακνυμι, to bite.) One who is mad in consequence of having been bitten by a mad animal.

LY'THRUM. (From λυθρον, blood; so called from its resemblance in colour.) The name of a genus of plants in the Linnæan system. Class, *Dodecandria.* Order, *Digynia.*

Ly'thrum salica'ria. (*Salicaria*, from *salix*, a willow: from the resemblance of its leaves to those of a willow.) The systematic name of the common or purple willow-herb. *Lysimachia purpurea.* The herb, root, and flowers possess a considerable degree of astringency, and are used medicinally in the cure of diarrhœas and dysenteries, fluor albus, and hæmoptysis.

LYTTA. *Cantharis. Musca Hispanica. Lytta vesicatoria*, of Linnæus. The blistering fly. Spanish fly. The importance of these flies, by their stimulant, corrosive, and epispastic qualities, in the practice of physic and surgery, is very considerable; indeed, so much so, as to induce many to consider them as the most powerful medicine in the materia medica. These flies have a green shining gold body, and are common in Spain, Italy, France, and Germany. The largest come from Italy, but the Spanish cantharides are generally preferred. When applied on the skin, in the form of a plaster, it soon raises a blister full of serous matter, and thus relieves inflammatory diseases, as phrenitis, pleuritis, hepatitis, phlegmon, bubo, myositis, arthritis, &c. The tincture of these flies is also of great utility in several cutaneous diseases, rheumatic affections, sciatic pains, &c. but ought to be used with much caution. See *Blister* and *Tinctura Lyttæ.*

M.

M. This letter has two significations: when herbs, flowers, chips, or such-like substances are ordered, in a prescription, and M. follows them, it signifies *manipulus*, a handful; and when several ingredients have been directed, it is a contraction of *misce*; thus, *m. f. haust.* signifies mix and let a draught be made.

Maca'ndon. (Indian.) A tree growing in Malabar, whose fruit is roasted and eaten as a cure for dysenteries, and in cholera morbus, and other complaints.

Macapa'tli. Sarsaparilla.

Macaxocotli'fera. The name of a tree in the West Indies, whose fruit is sweet and laxative. A decoction of the bark of this tree cures the itch, and the powder thereof heals ulcers.

MACBRIDE, David, was born in the county of Antrim, of an ancient Scotch family, in 1726. After serving his apprenticeship to a surgeon, he went into the navy, where he remained some years. At this period he was led to investigate particularly the treatment of scurvy, upon which he afterwards published a treatise. After the peace of Aix-la-Chapelle, he attended the lectures in Edinburgh and London; and about the end of 1749, settled in Dublin as a surgeon and accoucheur, but his youth and modesty greatly retarded his advancement at first. In 1764 he published his Experimental Essays, which were every where received with great applause; and the University of Glasgow conferred upon him a Doctor's degree. For several years after this he gave private lectures on physic; which he published in 1772: this work displayed great acuteness of observation, and very philosophical views of pathology; and contained a new arrangement of diseases, which appeared to Dr. Cullen of sufficient importance to be introduced into his system of nosology. His merit being thus displayed, he got into very extensive practice; indeed he was so much harassed, that he suffered for some time an almost total incapacity for sleep; when an accidental cold brought on high fever and delirium, which terminated his existence towards the close of 1778.

Mace. See *Myristica.*

Macedonian parsley. See *Bubon Macedonicum.*

Macedoni'sium se'men. The seeds of the Smyrnium olusatrum, said to possess bitterish, aromatic, and carminative virtues.

Ma'cer. (From *masa,* Heb.) Grecian macer or mace. The root which is imported from Barbary by this name, is supposed to be the simarouba, and is said to be antidysenteric.

MACERA'TION. (From *macero,* to soften by water.) In a pharmaceutical sense, this term implies an infusion either with or without heat, wherein the ingredients are intended to be almost wholly dissolved in order to extract their virtues.

Macero'na. The Smyrnium olusatrum, or herb Alexander.

Machæ'ria. The persicaria, or peach-kernels.

Machæ'rion. *Machæris.* The amputating-knife.

MACHA'ON. The proper name of an antient physician, said to be one of the sons of Æsculapius; whence some authors have fancied to dignify their own inventions with his name, as particularly a collyrium, described by Scribonius, intituled, *Asclepias Machaonis;* and hence also, medicine in general is by some called *Ars Machaonia.*

Machiname'ntum aristio'nis. A machine for reducing dislocation.

Machi'nulæ. A word sometimes used by physical writers to express those little compositions, which are parts of stone. It is a sort of rocky marle.

Ma'cia. The anagallis.

MA'CIES. A wasting of the body. See *Atrophy* and *Tabes.*

MA'CIS. Mace. See *Myristica.*

MACQUER, Joseph, was born at Paris in 1710, where he became doctor of medicine, professor of pharmacy, and censor-royal. He was likewise a member of some foreign academies, and conducted the medical and chemical department of the Journal des Sçavans. He pursued chemistry, not so much with a view of multiplying pharmaceutical preparations, as had been mostly the case before, but rather as a branch of natural philosophy; and gained a considerable reputation by publishing several useful and popular works on the subject. The most laborious of these was a dictionary in two octavo volumes; subsequently translated into English by Mr. Keir, with great improvements. He published also "Formulæ Medicamentorum Magistralium," and had a share in the composition of the Pharmacopæia Parisiensis of 1758. His death occurred in 1784.

Ma'cre. The macer.

Macrophysoce'phalus. (From μακρος, long, φυσις, nature, and κεφαλη, the head.) One who has a head unnaturally long, and large. This word, according to Turton, is only used by Ambrose Parey.

Macro'piper. (From μακρος, long, and πεπερι, pepper.) See *Piper longum.*

Macropnœ'a. (From μακρος, long, and πνεω, to breathe.) A difficulty of breathing, where the inspirations are at long intervals.

MA'CULA. A spot, a permanent discolouration of some portion of the skin, often with a change of its texture, but not connected with any disorder of the constitution.

Ma'culæ a'lbæ. White specks on the eye.

Ma'culæ hepa'ticæ. Hepatic, or liver-coloured spots on the skin.

Ma'culæ la'tæ. Shingles, or erysipelas.

Ma'culæ oculo'rum. Cataracts; white specks on the eye.

Ma'culæ pestile'ntes. Petechial, or purple spots.

Ma'culæ vene'reæ. The venereal eruption.

Ma'culæ vola'ticæ. Any transitory eruption.

Mad-apples. See *Solarum melongena.*

MADARO'SIS. (From μαδος, bald, without hair.) A defect or loss of eye-brows or eye-lashes, causing a disagreeable deformity, and painful sensation of the eyes, in a strong light.

Madder. See *Rubia.*

Madness. See *Melancholia*, and *Mania.*

Madness, Canine. See *Hydrophobia.*

Ma'dor. Moisture. A sweating. See *Ephidrosis.*

MAGATTI, Cæsar, was born in 1579, in the duchy of Reggio. He distinguished himself by his early proficiency in philosophy and medicine at Bologna, where he graduated in his 18th year; and afterwards went to Rome. Returning at last to his native country, he soon acquired so much reputation in his profession, that he was invited, as professor of surgery, to Ferrara; and after greatly distinguishing himself in that capacity, he was induced, during a severe illness, to enter into the fraternity of Capuchins. He still continued, however, to practise, and acquired the confidence of persons of the first rank, especially the duke of Modena. But suffering severely from the stone, he underwent an operation at Bologna in 1647, which he did not long survive. He was author of a considerable improvement in the art of surgery, by his work entitled "De rara Medicatione Vulnerum," condemning the use of tents, and recommending a simple, easy method of dressing, without the irritation of frequently cleansing and rubbing the tender granulations: and in an appendix he refutes the notion of gun-shot wounds being envenomed, or attended with cauterization. He afterwards published a defence of this work against some objections of Sennertus.

Magda'leon. (From *μασσω*, to knead.) A mass of plaster, or other composition, reduced to a cylindrical form.

Magella'nicus co'rtex. The *Winteranus cortex*, nearly allied in its properties to canella alba.

Ma'gistery. (From *magister*, a master.) The antient chemists used this word to signify a peculiar and secret method of preparing any medicine, as it were, by a masterly process. A subtle preparation, as a precipitate or solution, by menstruum.

Magistra'lia. (From *magister*, a master.) Applied by way of eminence, to such medicines as are extemporaneous, or in common use.

Magistra'ntia. (From *magistro*, to rule; so called by way of eminence, as exceeding all others in virtue.) See *Imperatoria.*

Ma'gma. (From *μασσω*, to blend together.) *Ecpiesma.* A thick ointment. The fæces of an ointment after the thinner parts are strained off. A confection.

MA'GNES. (From *Magnes*, its inventor.) The magnet, or load-stone. A muddy iron-ore, in which the iron is modified in such a manner as to afford a passage to a fluid called the magnetic fluid. The magnet exhibits certain phenomena; it is known by its property of attracting steel filings, and is found in Auvergne, in Biscay, in Spain, in Sweden, and Siberia.

Ma'gnes arsenica'lis. Arsenical magnet. It is a composition of equal parts of antimony, sulphur, and arsenic, mixed and melted together, so as to become a glassy body.

Ma'gnes epile'psiæ. The native cinnabar.

MAGNE'SIA. 1. The antient chemists gave this name to such substances as they conceived to have the power of attracting any principle from the air. Thus an earth which, on being exposed to the air, increased in weight, and yielded vitriol, they called *magnesia vitriolata:* and later chemists, observing in their process for obtaining magnesia, that nitrous acid was separated, and an earth left behind, supposing it had attracted the acid, called it *magnesia nitri*, which, from its colour, soon obtained the name of *magnesia alba.*

2. An earth not found pure in nature, but obtained by art from some of its combinations. It gives a peculiar character to the substances of which it forms a part. The stones which contain magnesia in a considerable quantity have generally a smooth and unctuous feel, a greenish cast, a fibrous or striated texture, and a silky lustre. Among them we may mention, *talc, steatite, serpentine, chlorite, asbestus, actinolite, jade, or nephritic stone, baikalite, boracite,* &c. It is likewise found neutralized with various acids. It has been discovered by Vauquelin in several sea-plants.

Properties.—Pure magnesia does not form with water an adhesive ductile mass. It is in the form of a very white spongy powder, soft to the touch, and perfectly tasteless. It is very slightly soluble in water. It absorbs carbonic acid gradually from the atmosphere. It changes very delicate blue vegetable colours to green. Its attraction to the acids is weaker than those of the alkalies. Its salts are partially decomposed by ammonia, one part of the magnesia being precipitated, and the other forming a triple compound. Its specific gravity is about 2.3. It is infusible even by the most intense heat; but when mixed with some of the other earths it becomes fusible. It combines with sulphur. It does not unite to phosphorus or carbon. It is not dissolved by alkalies in the humid way. When heated strongly, it becomes phosphorescent. With the dense acids it becomes ignited. With all the acids it forms salts of a bitter taste, mostly very soluble.

Method of obtaining Magnesia.—The usual method of procuring magnesia, is to precipitate it from sulphate of magnesia by means of an alkali.

To effect this, dissolve any quantity of sulphate of magnesia in a large quantity of distilled water, and add to it gradually a solution of perfectly pure subcarbonate of pot-ash or soda, till no more precipitate ensues. Then collect the precipitate on a cloth, and boil it repeatedly in a large quantity of distilled water, till this fluid passes perfectly tasteless. It is then to be dried, and exposed in a crucible to a red heat, till a sample of it, when cold, does not occasion the least effervescence with acids.

In this process, a double decomposition takes place, the sulphuric acid of the sulphate of magnesia combines with the alkali, and forms sulphate of potash; and the carbonic acid of the alkali joins to the disengaged magnesia, and forms subcarbonate of magnesia; the latter is precipitated, and the sulphate of potash remains in solution. On exposing the subcarbonate of magnesia to heat, the acid is expelled, and the magnesia is left behind in a pure state. The magnesia of the present London Pharmacopœia was formerly called *Magnesia calcinata: usta; pura.* It is directed to be made thus :—"Take of carbonate of magnesia, four ounces; burn it in a very strong fire, for two hours, or until acetic acid being dropped in, extricates no bubbles of gas." It is given as an absorbent, antacid, and eccoprotic, in cardialgia, spasms, convulsions, and tormina of the bowels of infants; pyrosis, flatulencies, and other diseases of the primæ viæ; obstipation, leucorrhœa, rickets, scrofula, crusta lactea, and podagra. The dose is from half a drachm to a drachm.

Magne'sia calcina'ta. See *Magnesia.*

Magn'esía opali'na. In making the hepar antimonii, some add, to the antimony and nitre, decrepitated sal-ammoniac, and thus make the opalin. It is a weaker emetic than the liver of antimony.

Magne'sia vitriola'ta. See *Magnesiæ sulphas.*

Magne'sia u'sta. See *Magnesia.*

MAGNE'SIÆ CARBO'NAS. *Magnesia alba.* Subcarbonate of magnesia. The London College direct it to be made as follows :—"Take of sulphate of magnesia, a pound; subcarbonate of potash, nine ounces; water, three gallons. Dissolve the subcarbonate of potash in three pints of the water, and strain; dissolve also the sulphate of magnesia separately in five pints of the water, and strain; then add the rest of the water to this latter solution, apply heat, and when it boils, pour in the former solution, stirring them well together; next, strain through a linen cloth; lastly, wash the powder repeatedly with boiling water, and dry it upon bibulous paper, in a heat of 200°." It is in form of very fine powder, considerably resembling flour in its appearance and feel; it has no sensible taste on the tongue; it gives a faint greenish colour to the tincture of violets, and converts turnsole to a blue. It is employed medicinally as an absorbent, antacid, and purgative, in doses from half a drachm to two drachms.

MAGNE'SIÆ SU'LPHAS. *Sulphas magnesiæ. Sulphas magnesiæ purificata. Magnesia vitriolata. Sal catharticus amarus. Sal catharticum amarum.* Sulphate of magnesia. Epsom salt. Bitter purging salt.

The sulphate of magnesia exists in several mineral springs, and in sea-water.

It is from these saline solutions that the salt is obtained; the method generally adopted for obtaining it is evaporation, which causes the salt to crystallize in tetrahedral prisms. It has a very bitter taste, and is soluble in its own weight of water at 60°, and in three-fourths of its weight of boiling water. Sulphate of magnesia, when perfectly pure, effloresces; but that of commerce generally contains foreign salts, such as the muriate of magnesia, which renders it so deliquescent, that it must be kept in a close vessel or bladder. By the action of heat it undergoes the watery fusion, and loses its water of crystallization, but does not part with its acid. One hundred parts of crystallized sulphate of magnesia consist of 29.35 parts of acid, 17 of earth, and 53.65 of water. The alkalies, strontian, barytes, and all the salts formed by these salifiable bases, excepting the alkaline muriates, decompose sulphate of magnesia. It is also decomposed by the nitrate, carbonate and muriate of lime.

Epsom salt is a mild and gentle purgative, operating with sufficient efficacy, and in general with ease and safety, rarely occasioning any gripes, or the other inconveniencies of resinous purgatives. Six or eight drachms may be dissolved in a proper quantity of common water; or four, five, or more in a pint or quart of the purging mineral waters. These solutions may likewise be so managed, in small doses, as to produce evacuation from the other emunctories; if the patient be kept warm, they increase perspiration, and by moderate exercise in the cool air, the urinary discharge. Some allege that this salt has a peculiar effect in allaying pain, as in colic, even independently of evacuation.

It is, however, principally used for the preparation of the subcarbonate of magnesia.

Magnet. See *Magnes.*

MAGNETISM. The property which iron possesses of attracting or repelling other iron, according to circumstances, that is, similar poles of magnets repel, but opposite poles attract each other.

MAGNETISM, ANIMAL. A sympathy lately supposed, by some persons, to exist between the magnet and the human body; by means of which, the former became capable of curing many diseases in an unknown way, somewhat resembling the performances of the old magicians. Animal magnetism is now entirely exploded.

Ma'gnum de'i do'num. So Dr. Mead calls the Peruvian bark.

MA'GNUM OS. The third bone of the lower row of bones of the carpus, reckoning from the thumb towards the little finger.

Ma'gnus mo'rbus. The great disease. So Hippocrates calls the epilepsy.

Magy'daris. The root of the herb laserwort.

Maha'goni. Mahogany. See *Swietenia.*

Mahaleb. A species of *Prunus.*

Mahmou'dy. *Scammonium.*

Maidenhair. See *Adianthum.*

Maidenhair, Canada. *Adianthum Canadense.* This is the *Adianthum pedatum,* of Linnæus. It is in common use in France, for the same purposes as the common adianthum is in this country, and appears to be far superior to it.

Maidenhair, English. See *Adianthum.*

Maidenhair-tree. *Ginkgo. Ginan Itsio.* In China and Japan, where this tree grows, the fruit acquires the size of a damask plum, and contains a kernel resembling that of our apricot. These kernels always make part of the desert at all public feasts and entertainments. They are said to promote digestion, and to cleanse the stomach and bowels.

Maja'nthemum. See *Convallaria majalis.*

Mail-a'nschi. A species of rhamnus growing in Malabar. A decoction of its root is recommended against the gout; and a decoction of its leaves against the jaundice.

Mail-e'lou. A Malabar tree, from whose bruised leaves and bark is prepared an apozem against the after-pains of women in child-bed, and for promoting the lochia.

Mail-elou-ka'tou. This is larger than the above species. It is evergreen and astringent.

MAJORA'NA. (*Quod mense Maio floreat,* because it flowers in May.) See *Origanum majorana.*

Majora'na syri'aca. See *Teucrium marum.*

Ma'la. (From *malus,* an apple; so called from its roundness.) A prominent part of the cheek.

Ma'la assy'ria. The citron.

Ma'la æthio'pica. A species of *Lycopersicon.*

Ma'la aura'ntia. See *Citrus aurantium.*

Ma'la coto'nea. The quince.

Ma'la insa'na ni'gra. The fruit of the black-fruited night-shade. See *Solanum melongena.*

Ma'labar plum. See *Eugenia jambos.*

Malaba'thri o'leum. Oil of cassia lignea.

Malaba'thrum. (Μαλαβαθρον: from *Malabar,* in India, whence it was brought, and *betre,* a leaf, Ind.) The leaf of the tree whose bark is called cassia. See *Laurus cassia.*

Malaba'thrinum. (From μαλαβαθρον, malabathrum.) Ointment of malabathrum. It is compounded of myrrh, spikenard, malabathrum, and many other aromatic ingredients.

Malacca bean. See *Avicennia tomentosa.*

Ma'laca ra'dix. The root of the sagittaria alexipharmaca.

Ma'lache. (From μαλακος, soft; so called from the softness of its leaf.) The mallow.

MALACHITE. (From μαλαχη, the mallow; from its resemblance in colour to the mallow.) A species of copper ore found in Siberia.

Mala'cia. (From μαλαχιον, a ravenous fish.) *Pica,* or depraved appetite, when such things are coveted as are not proper for food.

MALACO'STEON. (From μαλακος, soft, and οςεον, a bone.) *Mollities ossium.* A softness of the bones.

Mala'ctica. (From μαλασσω, to soften.) Emollient medicines.

MA'LÆ OS. (From *malus,* so called from its roundness.) The cheek-bone. See *Jugale os.*

Malagfue'tta. *Malaguetta.* Grains of Paradise.

Mala'gma. (From μαλασσω, to soften.) *Bæos.* It is synonymous with *Cataplasma,* from the frequency of making cataplasms to soften; but formerly *malagmas* were made of many other ingredients.

Malamiris. A species of *Piper.*

MALA'RUM O'SSA. The cheek-bones. See *Jugale os.*

MA'LATES. Salts formed by the union of the malic acid, or acid of apples, with different bases; thus *malate of copper, malate of lead, &c.*

Ma'le. The arm-pit.

Male fern. See *Polypodium filix mas.*

Male orchis. See *Orchis mascula.*

Male speedwell. See *Veronica.*

MALIC ACID. *Acidum malicum.* This acid is obtained by saturating the juice of apples with alkali, and pouring in the acetous solution of lead, until it occasions no more precipitate. The precipitate is then to be edulcorated, and sulphuric acid poured on it, until the liquor has acquired a fresh acid taste, without any mixture of sweetness. The whole is then to be filtered, to separate the sulphate of lead. The filtered liquor is the malic acid, which is very pure, remains always in a fluid state, and cannot be rendered concrete. The union of this acid with different bases, constitutes what are called malates.

MALI'GNANT. *Malignus.* A term which may be applied to any disease whose symptoms are so aggravated as to threaten destruction of the patient. It is frequently used to signify a dangerous epidemic.

Malignant fever. See *Typhus.*

Malignant sore throat. See *Cynanche maligna.*

Ma'lis. A disease of the skin, produced by an insect lodging underneath. It is very common in Persia, where the disease is produced by the worm called *Gordius medinensis*, or *Dracunculus Persicus*; in America, by the *Pulex*; and it is sometimes produced in Europe by the *Pediculus*.

Mallam-to'ddali. The name of a tree in Malabar, the root, bark, leaves, and fruit of which are esteemed, as a specific, in the epilepsy.

MALLEABILITY. (*Malleabilitas*; from *malleus*, a hammer.) The property which several metals possess of being extended under the hammer into thin plates, without cracking. The thin leaves of silver and gold are the best examples of malleability.

Malleamothe. *Pavette. Pavate. Erysipelas curans arbor.* A shrub which grows in Malabar. The leaves, boiled in palm oil, cure the impetigo; the root, powdered and mixed with ginger, is diuretic.

Ma'llei ante'rior. See *Laxator tympani.*

Ma'llei exte'rnus. See *Laxator tympani.*

Ma'llei inte'rnus. See *Tensor tympani.*

MALLE'OLUS. (Dim. of *malleus*, a mallet; so called from its supposed resemblance to a mallet.) The ancle, distinguished into external and internal, or *malleolus externus* and *internus*.

MA'LLEUS. (*Malleus quasi molleus*; from *mollio*, to soften; a hammer.) A bone of the internal ear is so termed from its resemblance. It is distinguished into a head, neck, and manubrium. The *head* is round, and encrusted with a thin cartilage, and annexed to another bone of the ear, the incus, by ginglymus. Its *neck* is narrow, and situated between the head and manubrium, or handle; from which a long slender process arises, adheres to a furrow in the auditory canal, and is continued as far as the fissure in the articular cavity of the temporal bone. The *manubrium* is terminated by an enlarged extremity, and connected to the membrana tympani by a short conoid process.

Mallow, common. See *Malva.*

Mallow, round-leaved. See *Malva rotundifolia.*

Mallow, vervain. See *Malva alcea.*

Malograna'tum. (From *malum*, an apple, and *granum*, a grain; so named from its grain-like seeds.) The pomegranate.

MALPIGHI, Marcello, was born near Bologna, in 1628. He went through his preliminary studies with great eclat, and especially distinguished himself by his zealous pursuit of anatomy. His merit procured him in 1653, the degree of doctor in medicine, and three years after the appointment of professor of physic, at Bologna; but he was soon invited to Pisa, by the Grand Duke of Tuscany. However, the air of this place injuring his health, which was naturally delicate, he was obliged in 1659 to return to his office at Bologna. Three years after he was tempted by the magistrates of Messina, to accept the medical professorship there; but his little deference to ancient authorities involved him in controversies with his colleagues, which forced him to return again to Bologna, in 1666. His reputation rapidly extended throughout Europe as a philosophical enquirer, and he was chosen a member of the royal society of London, which afterwards printed his works at their own expense. In 1691, Pope Innocent XII. on his election, chose Malpighi for his chief physician and chamberlain, whence he removed to Rome; but three years after he was carried off by an apoplectic stroke. He joined with an indefatigable pursuit of knowledge, a remarkable degree of candour and modesty; and ranks very high among the philosophers of the physiological age in which he lived. He was the first to employ the microscope in examining the circulation of the blood; and the same instrument assisted him in exploring the minute structure of various organs, as is evident from his first publication on the lungs, in 1661; and this was followed by successive treatises on many other parts. In 1669, his essay "De Formatione Pulli in Ovo," was printed at London, with his remarks on the silkworm, and on the conglobate glands: much light was thrown by these investigations on the obscure subject of generation, and other important points of physiology. He was thence led to the consideration of the structure and functions of plants, and evinced himself an original, as well as a very profound observer. His "Anatome Plantarum" was published by the royal society in 1675 and 1679, with some observations on the incubation of the egg. His only medical work, "Consultatiorum Medicinalium Centuria Prima," did not appear till 1713: he was not distinguished as a practitioner, but deserves praise for pointing out the mischief of bleeding in the malignant epidemics, which prevailed in Italy in his time.

Malpi'ghia gla'bra. (So named in honour of Malpighi.) The systematic name of a tree which affords an esculent cherry.

Ma'ltha. (From μαλασσω, to soften.) *Malthacodes.* A medicine softened and tempered with wax.

Maltha'ctica. (From μαλθακιζω, to soften.) Emollient medicines.

Maltheorum. Common salt.

MA'LUM. 1. A disease. 2. An apple.

Ma'lum mo'rtuum. A disease that appears in the form of a pustule, which soon forms a dry, brown, hard, and broad crust. It is seldom attended with pain, and remains fixed for a long time before it can be detached. It is mostly observed on the tibia and os coccygis, and sometimes the face.

Ma′lus. The apple-tree. See *Pyrus Malus.*

Ma′lus I′ndica. *Bilumbi biting-bing*, of Bontius. The *malus Indica :—fructu pentagono*, of Europeans. It is carefully cultivated in the gardens of the East-Indies, where it flowers throughout the year. The juice of the root is cooling, and drank as a cure for fevers. The leaves boiled and made into a cataplasm with rice, are famed in all sorts of tumours, and the juice of the fruit is used in almost all external heats, dipping linen rags in it, and applying them to the parts. It is drank, mixed with arrack, to cure diarrhæas; and the dried leaves, mixed with betel leaves and given in arrack, are said to promote delivery. The ripe fruit is eaten as a delicacy, and the unripe made into a pickle for the use of the table.

MA′LVA. (*Malva, quasi molva ;* from *mollis*, soft; named from the softness of its leaves.) 1. The name of a genus of plants in the Linnæan system. Class, *Monadelphia.* Order, *Polyandria.*

2. The pharmacopœial name of the common mallow. See *Malva sylvestris.*

Ma′lva a′lcea. The vervain mallow. The flowers of this plant are used medicinally in some countries.

Ma′lva arbo′rea. See *Alcea.*

Ma′lva rotundifo′lia. Round-leaved mallow. The whole herb and root possess similar virtues to, and may be substituted for, the common mallow. See *Malva.*

Ma′lva sylve′stris. The systematic name of the common mallow. *Malva vulgaris. Malva : — caule erecto herbaceo, foliis septemlobatis acutis, pedunculis petiolisque pilosis.* This indigenous plant has a strong affinity to the althæa, both in a botanical and a medical respect. See *Althæa.* The leaves and flowers are principally used in fomentations, cataplasms, and emollient enemas. The internal use of the leaves seems to be wholly superseded by the radix althææ.

Ma′lva verbena′cea. *Alcea. Alcea vulgaris major.* Vervain mallow. This plant is distinguished from the common mallow, by its leaves being jagged, or cut in about the edges. It agrees in virtues with the other mallows, but it is least mucilaginous of any.

Ma′lva vulga′ris. See *Malva.*

Malvavi′scus. (From *malva*, the mallow, and *viscus*, glue; so named from its viscidity.) The marsh-mallow. See *Althæa officinalis.*

MALVERN WATER. The village of Great Malvern has, for many years, been celebrated for a spring of remarkable purity, which has acquired the name of the holy well, from the reputed sanctity of its waters, and the real and extensive benefit long derived in various cases from its use.

The holy well water, when first drawn, appears quite clear and pellucid, and does not become sensibly turbid on standing. It possesses somewhat of an agreeable pungency to the taste; but this is not considerable. In other respects it does not differ in taste from pure good water.

The contents of Malvern holy well are: — some carbonic acid, which is in an uncombined state, capable of acting upon iron, and of giving a little taste to the water; but the exact quantity of which has not been ascertained: — a very small portion of earth, either lime or magnesia, united with the carbonic and marine acids: perhaps a little neutral alkaline salt, and a very large proportion of water: — for we may add, that, the carbonic acid perhaps excepted, the foreign matter is less than that of any spring-water which we use. No iron, or metal of any kind, is found in it, though there are chalybeates in the neighbourhood.

It is singular that, notwithstanding its apparent purity, this water is said not to keep well, and soon acquires a fœtid smell, by standing in open vessels.

Malvern water, like many others, was at first only employed as an external application; and this, indeed, is still its principal use, though it is extended, with some advantage, to a few internal diseases. It has been found highly efficacious in painful and deep ulcerations, the consequence of a scrophulous habit of body, and which are always attended with much local irritation, and often general fever. Applied to the sore, it moderates the profuseness of the discharge, corrects the fetor, which so peculiarly marks a caries of the bone, promotes the granulating process, and a salutary exfoliation of the carious part; and by a long perseverance in this course, very dangerous and obstinate cases have at last been cured. Inflammation of the eye, especially the ophthalmia, which is so troublesome in scrophulous habits, often yields to this simple application, and we find that, for a great number of years, persons afflicted with sore eyes, have been in the habit of resorting to Malvern holy well. Another order of external diseases, for which this water is greatly celebrated, is cutaneous eruptions; even those obstinate cases of dry desquamations, that frequently follow a sudden application of cold in irritable habits, are often cured by this remedy. Where the skin is hot and dry, it remarkably relieves the intolerable itching of herpetic disorders, and renders the surface of the body more cool and perspirable. It appears, however, from a nice observation of Dr. Wall, that this method of treatment is not so successful in the cutaneous eruptions of very lax leucophlegmatic habits, where the extremities are cold and the circulation languid; but that it succeeds best where there is unusual irritation of the skin, and where it is apt to break in painful fissures, that ooze out a watery acrid lymph. On the first application of this water to an inflamed surface, it will often for a time increase the pain and irritation, but these effects go off in a few days.

The great benefit arising from using Malvern waters, as an external remedy, in diseases of the skin and surface of the body, has led to its employment in some internal disorders, and often with considerable advantage. Of these, the most important are painful affections of the kidneys and bladder, attended with the discharge of bloody, purulent, or fœtid urine, the hectic fever, produced by scrophulous ulceration of the lungs, or very extensive and irritating sores on the surface of the body, and also fistulas of long standing, that have been neglected, and have become constant and troublesome sores.

The Malvern water is in general a perfectly safe application, and may be used with the utmost freedom, both as an external dressing for sores and as a common drink.

The internal use of Malvern waters is sometimes attended at first with a slight nausea, and, not unfrequently, for the first day or two, it occasions some degree of drowsiness, vertigo, or slight pain of the head, which comes on a few minutes after drinking it. These symptoms go off spontaneously, after a few days, or may readily be removed by a mild purgative. The effects of this water on the bowels are not at all constant; frequently it purges briskly for a few days, but it is not uncommon for the body to be rendered costive by its use, especially as Dr. Wall observes, with those who are accustomed to malt liquors. In all cases, it decidedly increases the flow of urine, and the general health of the patient. The duration of a course of Malvern waters must vary very considerably on account of the different kinds of disease for which this spring is resorted to.

Mame'i. The mammoe, momin, or toddy-tree. This tree is found in different parts of the West Indies, but those on the Island of Hispaniola are the best. From incisions made in the branches, a copious discharge of pellucid liquor is obtained, which is called momin, or toddy wine; it must be drank very sparingly, because of its very diuretic quality. It is esteemed as an effectual preservative from the stone, as also a solvent of it when generated. There are two species.

Mami'llæ. (Dim. of *mamma*, the breast.) The breasts of men are so termed. It is likewise applied sometimes to the nipple.

Mami'ra. It is said, by Paulus Ægineta, to be the root of a plant which is of a detergent quality. Some think it is the root of the doronicum; but what it really is, cannot be ascertained.

MA'MMA. See *Breast.*

MA'MMARY ARTERIES. *Arteriæ mamillares.* The internal mammary artery is a branch of the subclavian, and gives off the mediastinal, thymal, and pericardiac arteries. The external mammary is a branch of the axillary artery.

MAMMARY VEINS. *Venæ mamillares.* These vessels accompany the arteries, and evacuate their blood into the subclavian vein.

Mammea Americana. The systematic name of the tree on which the mammee fruit grows. See *Mammee.*

Mammee. A delicious fruit, the produce of the *Mammea Americana*, of Linnæus. They have a very grateful flavour when ripe, and are much cultivated in Jamaica, where they are generally sold in the markets for one of the best fruits of the island.

MAN. *Homo.* Man is compounded of solids, fluids, a vital principle, and, what distinguishes him from every other animal, a soul.

I. The solids are divided into hard and soft, which analysis demonstrates to be formed of earthy particles, connected together by an intermediate gluten. The hard parts are the bones and cartilages. The soft parts, muscles, nerves, the viscera, and every other part, except the fluids. See *Bone, Cartilage, Ligament, Muscle, Artery, Vein, Nerve, Lymphatics,* &c.

II. The fluids are very various. See *Fluids of the Body.*

Anatomy demonstrates the structure of the various parts of which the human body consists. Chemistry has, of late, made great progress towards ascertaining its principles and elements, which are as follows: —

The *constituent principles* of man are — 1. *The water*, which constitutes the greatest part of the humours, and is the vehicle of the other principles. 2. *The animal gas*, which consists of carburetted hydrogen, and is found, not only in the blood, but in all the other fluids. 3. *The inflammable gas*, emitted from the large intestines, *in flatu*. 4. *The animal gluten*, which consists of carbon and azote, and forms the fibres of the solid parts; the caseous portion of the milk; and the principal part of the cruor of the blood. 5. *The albumen*, present in the serum of blood. 6. The *jelly*, found in the serum of the blood; lymph of the lymphatic vessels, and other fluids. 7. *The cruor*, which is the animal gluten impregnated with iron. 8. *The mucus*, which lubricates the primæ viæ; the aërial surfaces of the lungs; the parts of generation, and the urinary passages. 9. *The animal oil*, which fills the cells of the adipose membrane. 10. *The resin,* found in the bile. 11. *The sebacic acid,* which is present in animal oil. 12. *The phosphoric acid,* which enters into the composition of the animal earth of the bones, and some of the salts of the urine. 13. *The saclactic acid,* in the sugar of the serum of the milk. 14. *The sugar,* latent in the serum of the milk. 15. *The animal earth,* which is phosphate of lime, and not only forms the greatest part of the bones, but also is found in the fibres of the soft parts, and in all the fluids. 16. *Phosphate of ammonia,* and 17. *Phosphate of soda,* both of which are detected in the urine. 18. *Culinary salt,* obtained from the urine, gastric juice, and other humours.

The *elementary principles* of our body hitherto known, are, 1. *Azote,* an element which, combined with hydrogen, constitutes volatile alkali; with the matter of heat, azotic air; with carbon, the gluten of animal fibres. *Azote* is the primary element of the animal body, for it may be extracted from almost every part of the animal; the mucus, jelly, membranes, tendons, ligaments, and cartilages, afford it in a less degree; the lymph, serum of the blood, the water of hydropic patients, the liquor amnii, and cheese, give out more; the greatest quantity is obtained from the coagulable lymph of the blood, and from muscle. The flesh of young animals contains less than that of old: and it is in greater quantity in sarcophagous, than in the flesh of phytophagous animals and fish. 2. *The matter of heat,* which enters into the composition of both solids and fluids, and which, in a separate form, constitutes the animal heat. 3. *The matter of light,* which, in its free state, produces vision, and, when compounded, enters as an element into the composition of oil and all other inflammable parts. The eyes of animals, which shine in the night-time, owe this property to the matter of light. 4. *The electric matter,* which enters into all bodies, and affords the phenomena of animal electricity. 5. *Oxygen,* which, in combination with the matter of heat, constitutes vital air; with hydrogen, forms water; with acescent bases, the acid salts of our fluids. 6. *Hydrogen,* which, combined with oxygen, forms water; with azote, volatile alkali; with the matter of heat, inflammable air, which is emitted from the large intestines; and with carbon, animal gas; and lastly, combined with carbon, and the sebacic acid, constitutes the oil of the adipose membrane. 7. *Carbon,* which, in combination with hydrogen and the sebacic acid, constitutes the oil of the adipose membrane; with hydrogen alone, animal gas; with azote, animal gluten. 8. *Sulphur,* which, combined with inflammable air, constitutes the hepatic air, that exhales from muscular fibres, hair, incubated eggs, animal gluten, and, according to Lavoisier, human excrement. 9. *Phosphorus,* which, with oxygen, forms the phosphoric acid; and, with inflammable air, phosphuretted hydrogen. The lucid sweat of some men, the phosphorescence, or light, given out by the putrefying bodies of some animals, and the phosphorus obtained from cheese, and human bones, sufficiently show that phosphorus constitutes an element of our body. 10. *Soda,* or the fixed mineral alkali. 11. *Potash,* or the fixed vegetable alkali. Each of these is found in several of the fluids of the human body. 12. *An earthy element.* Of the earths, no kind is so frequently detected as the *calcareous,* which is found in the bones and other parts. 13. *A metallic element.* Of so great a number of metals, iron and manganese alone are found in an organized body, whether animal or vegetable. Iron is in greater quantity in the flesh than in the bones; but in the greatest proportion in the cruor or red part of the blood. 14. *An odorous principle,* perceptible in all the animal fluids; but of a peculiar kind in the human urine and excrements. 15. *The nervous fluid,* or principle contained in the nerves, and which appears to be an element *sui generis,* distinct from all known fluids, and not to be collected by art.

III. The *vital principle.* In all solid and fluid parts of a living body, there exists an element, with properties peculiar to itself, which constitutes life; hence it is justly called vital. This principle induces a mode of union in the other elements, widely differing from that which arises from the common laws of chemical affinity. By the aid of this principle, nature produces the animal fluids, as blood, bile, semen, and the rest, which can never be produced by the art of chemistry. But if, in consequence of death, the laws of vital attraction, or affinity, cease to operate, then the elements, recovering their former properties, become again obedient to the common laws of chemical affinity, and enter into new combinations, from which, new principles, in the process of putrefaction, are produced. Thus the hydrogen, combining itself with the azote forms volatile alkali; and the carburetted hydrogen, with the azote, putrid air, into which the whole body is converted. It also appears from hence, why organized bodies alone, namely, animal and vegetable, are subject to putridity; to which inorganic or mineral substances are in no degree liable, the latter not being compounded according to the laws of vital affinity, but only according to those of chemical affinity. For the fatiscense, or resolution of pyrites, or sulphuret of iron, in atmospheric air, is not putrefaction, but only the oxygen, furnished by the air, combining with the sulphur, and forming iron and sulphate of iron.

Fire, as well as putridity, separates the constituent principles of animal bodies into their elements; but these, by a peculiar law, under the action of fire, again combine in a different manner, and form peculiar constituent principles, called the products of fire. Thus the hydrogen, combining with azote, is changed into volatile alkali: but with a large proportion of carbon, it forms empyreumatic oil. From what has hitherto been said, it will also appear, that the true constituent principles of the animal body cannot be detected, either by putrefaction or the action of fire; for by these means we only discover the elements of those principles. Thus, whenever volatile alkali is found to be generated, azote and hydrogen may be supposed to have been present in the natural state of the animal substance; and when empyreumatic oil is obtained, it may be concluded it is furnished by the hydrogen and carbon of the animal part.

Ma′naca. A Brazil shrub, whose root is powerfully emetic and cathartic.

Ma′ncoron. According to Oribasius, a kind of sugar, which is found in a sort of cane.

Mancura′na. The origanum vulgare.

MANDI′BULA. (From *mando*, to chew.) The lower jaw. See *Maxilla inferior.*

Mandra′gora, (From μανδρα, a den, and αγειρω, to collect; because it grows about caves and dens of beasts; or from the German *man dragen*, bearing man.) See *Atropa.*

Mandragori′tes. (From μανδραγορα, the mandrake.) Wine, in which the roots of the male mandrake are infused.

Mandrake. See *Atropa.*

Manduca′tor. (From *manduco*, to chew.) The muscles which perform the action of chewing.

Ma′nga. (Indian.) The mango-tree.

MANGANESE. This metallic substance seems, after iron, to be the most frequently diffused metal through the earth; its ores are very common. As a peculiar metal, it was first noticed by Gahn and Scheele, in the years 1774 and 1777. It is always found in the state of an oxid, varying in the degree of oxidizement. La Peyrouse affirmed that he had found manganese in a metallic state; but there was probably some mistake in his observation. The ores are distinguished into *grey oxid of manganese, black oxid of manganese, reddish white oxid of manganese*, and *carbonate of manganese*. All these combinations have an earthy texture; they are very ponderous; they occur both amorphous and crystallized; and generally contain a large quantity of iron. Their colour is black, blackish brown, or grey, seldom white. They soil the fingers like soot. They are sometimes crystallized in prisms, tetrahedral, rhomboidal, or striated.

Properties.—Manganese is of a whitish grey colour. Its fracture is granulated, irregular, and uneven. It is of a metallic brilliancy, which it, however, soon loses in the air. Its specific gravity is about 8. It is very hard, and extremely brittle. It is one of the most refractory metals, and most difficult to fuse, requiring at least 160° of Wedgwood's pyrometer. Its attraction of oxygen is so rapid, that exposure to the air is sufficient to render it red, brown, black, and friable, in a very short time; it can, therefore, only be kept under water, oil, or ardent spirit. It is the most combustible of all the metals. It decomposes water, by means of heat, very rapidly, as well as the greater part of the metallic oxids. It decomposes sulphuric acid. It is soluble in nitric acid. It is fusible with earths, and colours them brown, violet, or red, according to its state of oxidizement. It frees from colour glasses tinged by iron. It does not readily unite with sulphur. It combines with phosphorus. It unites with gold, silver, and copper, and renders them brittle. It unites to arsenic in close vessels, but does not enter into union with mercury. It forms three differently coloured oxids, by combining with different proportions of oxygen.

Method of obtaining Manganese.—This metal is obtained by mixing the black oxid, finely powdered, with pitch; making it into a ball, and putting this into a crucible, with powdered charcoal, one-tenth of an inch thick at the sides, and one-fourth of an inch deep at the bottom. The empty space is then to be filled with powdered charcoal; a cover is to be luted on; and the crucible exposed, for an hour, to the strongest heat that can be raised. Or, digest the black oxid of manganese repeatedly, with the addition of one-sixteenth of sugar, in nitric acid; dilute the mixture with three times its bulk of water; filter it, and decompose it by the addition of potash; collect the precipitate, form it into a paste with oil, and put it into a crucible, well lined with charcoal. Expose the crucible for at least two hours to the strongest heat of a forge.

Manganese may also be obtained in the following manner:

Prepare a saturated solution of sulphate of manganese, bring it to a boiling heat, and add to it, gradually, a solution of tartrate of potash, until no further precipitate ensues; then filter the solution, and wash the precipitate in water, and when dry, make it into a paste with oil, and proceed as before.

In this process, the sulphuric acid unites to the potash, and forms sulphate of potash, and the tartaric acid joins to the oxyd of manganese, and forms a tartrate of manganese, which is decomposable by heat.

Mangel wursel. The root of scarcity. A plant of great importance, as a substitute for bread in periods of famine. It has not, however, succeeded so well in this country as in Germany. It is properly a species of beet.

MANGET, John James, was born at Geneva in 1652. He originally studied for the clerical profession, but, after five years' labour, his inclination to medical pursuits prevailed, and he made such progress, without the aid of any teacher, that he was admitted to the degree of doctor at Valence in 1678. He then commenced practice in his native city, and obtained considerable reputation, and refused many invitations to go to other countries. In 1699 he was appointed chief physician to Frederick III. afterwards first King of Prussia. In his literary labours he was indefatigable even to the end of his life, which terminated in his 91st year. Among the numerous works of compilation, executed by him, originality is not to be expected; nor are they remarkable for judgment or accuracy, though still sometimes useful for reference. He published ample collections on almost every subject connected with medicine, besides improved editions of the works of others: but the most important of his productions is entitled "Bibliotheca Scriptorum Medicorum veterum et recentiorum," at which he laboured when at least eighty years of age.

Mangi′fera. (From *Mango*, the name of the fruit which it bears.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*. The Mango-tree.

Mangi′fera I′ndica. The systematic name of the mango-tree, which is cultivated all over Asia. Mangos, when ripe, are juicy, of a good flavour, and so fragrant as to perfume the air to a considerable distance. They are eaten either raw or preserved with sugar. Their taste is so luscious, that they soon pall the appetite. The unripe fruits are pickled in the milk of the cocoa-nut that has stood until sour, with salt, capsicum, and garlick. From the expressed juice is prepared a wine; and the remainder of the kernel can be reduced to an excellent flour for the making of bread.

Mango. See *Mangifera indica*.

Mangostana.
Mangosteen. } See *Garcinia*.
Mangosteen bark.

MA′NIA. (From μαινομαι, to rage.) Raving or furious madness. A genus of disease in the class *neuroses*, and order *vesaniæ*, of Cullen. The definition of mania is delirium, unaccompanied with fever; but this does not seem altogether correct; as a delirium may prevail without any frequency of pulse, or fever; as happens sometimes with women in the hysteric disease. In mania, the mind is not perfectly master of all its functions; it receives impressions from the senses, which are very different from those produced in health; the judgment and memory are both lost, or impaired, and the irritability of the body is much diminished, being capable, as is supposed, of resisting the usual morbid effects of cold, hunger, and watching, and being likewise less susceptible of other diseases than before.

Mania may be said to be a false perception of things, marked by an incoherence, or raving, and a resistance of the passions to the command of the will, accompanied, for the most part, with a violence of action, and furious resentment at restraint.

There are two species of madness, viz. the melancholic and furious.

Madness is occasioned by affections of the mind, such as anxiety, grief, love, religion, terror, or enthusiasm; the frequent and uncurbed indulgence in any passion, or emotion, and by abstruse study. In short, it may be produced by any thing that affects the mind so forcibly as to take off its attention from all other affairs. Violent excercise, frequent intoxication, a sedentary life, the suppression of periodical and occasional discharges and secretions, excessive evacuations, and paralytic seizures, are likewise enumerated as remote causes. Certain diseases of the febrile kind have been found to occasion madness, where their action has been very violent. In some cases it proceeds from an hereditary predisposition. Two constitutions are particularly the victims of madness; the sanguine and melancholic: by the difference of which its appearance is somewhat modified. Each species of mania is accompanied with particular symptoms. Those which attend on the melancholic are sadness, dejection of spirits, and its attendants. Those which accompany an attack of furious madness, are severe pains in the head, redness of the face, noise in the ears, wildness of the countenance, rolling and glistening of the eyes, grinding of the teeth, loud roaring, violent exertion of strength, absurd incoherent discourse, unaccountable malice to certain persons, particularly to the nearest relatives and friends, a dislike to such places and scenes as formerly afforded particular pleasure, a diminution of the irritability of the body, with respect to the morbid effects of cold, hunger and watching, together with a full, quick pulse.

Mania comes on at different periods of life; but, in the greater number of cases, it makes its attack between thirty and forty years of age. Females appear to be more subject to mania than males.

Dissections of maniacal cases, Dr. Thomas observes, most generally show an effusion of water into the cavities of the brain; but, in some cases, we are able to discover evident marks of previous inflammation, such as thickening and opacity of the tunica arachnoides and pia mater. In a few instances, a preternatural hardness of the substance of the brain.

From Dr. Greding's observations, it appears that the skulls of the greater number of such persons are commonly very thick. Some he found of a most extraordinary degree of thickness; but it appears that the greater number of insane people die of atrophy and hydrothorax.

The treatment of madness is partly corporeal, partly mental. The leading indications under the first head are: to diminish vascular or nervous excitement when excessive, as in mania; to increase them when defective, as in melancholia; at the same time guarding against the several exciting causes, and removing any obvious fault in the constitution, or in particular parts, by which the brain may be sympathetically affected. Among the most powerful means of lessening excitement is the abstraction of blood, which freely practised has been often an effectual remedy in recent cases and robust habits; but repeated small bleedings are rather likely to confirm the disease; and in those, who have long laboured under it, the object should merely be to obviate dangerous accumulation in the head, by occasionally withdrawing the requisite quantity locally. Purging is much more extensively applicable; where the strength will admit, it may be useful to make very large evacuations in this way; and in all cases it should be a rule to procure regular discharges from the bowels, which are generally torpid. Calomel is mostly proper, as it may evacuate bile more freely, and have other beneficial effects; but it usually requires the assistance of other cathartics. The application of cold to the head is materially serviceable under increased excitement, and some have advised it to the body generally; at any rate, the accumulation of heat should be avoided, and the antiphlogistic regimen steadily observed. Emetics have sometimes had a good effect, especially as influencing the mind of the patient; but to diminish excitement, and induce diaphoresis, it will generally be better to give merely nauseating doses; and occasionally their operation may be promoted by the tepid bath; even the hot bath has been found useful, producing great relaxation, and rendering the patient more tractable. Digitalis may be employed with advantage from its sedative power, exerted especially on the circulation, pushing it till some obvious effect is produced. Narcotics, particularly opium, have been much used, but certainly are not indiscriminately proper: where there is fullness of the vessels of the head, they may even do mischief; and where organic disease exists, they will probably only palliate: whenever resorted to, the dose should be large, such as may induce sleep, and if no mitigation of the disease appear, it may be better not to persevere in them. Camphor has been sometimes decidedly useful, carried gradually to a very considerable extent. Blisters and other means of lessening fullness and irritation in the brain, should not be neglected, where circumstances indicate their use.—In the melancholic, on the other hand, where there is rather a deficiency of excitement, it is necessary to direct a more generous diet, nutritious and easy of digestion, as the stomach is usually weak, with a moderate quantity of some fermented liquor, and medicines of a tonic or even stimulant nature, especially ammonia, to relieve flatulence and acidity. Attention should be paid to the bowels, and to maintain the function of the skin, &c. The utility of the cold bath seems questionable in melancholics; though, it may occasionally arrest a paroxysm of mania. Regular exercise may contribute materially to improve the health; and even hard labour has been often signally useful in a convalescent state, particularly to those accustomed to it. If the mental derangement supervened on the stoppage of any evacuation, or the metastasis of any other disorder; or appear connected with a scrophulous or syphilitic taint; proper remedies to restore the former, or remove the latter, should be exhibited: and in some instances trepanning has relieved the brain from local irritation. In the management of the insane, it is necessary to inspire a certain degree of awe from a conviction of superior power, and at the same time seek to gain their confidence and affection by steadiness and humanity. Some restraint is often necessary for the security of the patient, or of others, carefully watching, or even confining them, if they threaten the lives of their attendants. When they refuse to take food, or medicine, or any thing which appears absolutely necessary, coercion is proper, or sometimes these caprices may be overcome by stratagem; or exciting uneasy sensations by the motion of a swing, whirling chair, &c. In order to remove any deranged association of ideas, it will be right to endeavour to occupy their minds with some agreeable and regular train of thought, cheerful music, poetry, narrative, the elementary parts of geometry, &c. according to their previous inclinations; to lead them gradually to their former habits, and the society of their friends, engage them in rural sports, take them to public amusements, the watering places, &c. but with as little appearance of design as possible.

Ma'nihot. The jatropha manihot.

Mani'pulus. (*Quod manum impleat*, because it fills the hand.) A handful.

Manjapu'meram. A common tree in the West Indies, the flowers of which are distilled, and the water used against inflammations of the eyes.

MA'NNA. (From *mano*, a gift, Syr. it

being the food given by God to the children of Israel in the wilderness; or from *mahna*, what is it? an exclamation occasioned by their wonder at its appearance.) See *Fraxinus.*

Ma′nna Briganti′aca. A species of manna brought from Brianconois in Dauphiny.

Ma′nna Calabri′na. Calabrian manna.

Ma′nna canula′ta. Flaky manna, or manna concreted on straw, or chips.

Ma′nna secu′nda. An inferior or second sort of manna.

Ma′nna thu′ris. A coarse powder of olibanum.

Manni′fera a′rbor. (From *manna*, and *fero*, to bear.) The fraxinus ornus.

Manso′rius. (From *mando*, to chew.) The masseter muscle.

Manti′le. The name of a bandage.

Ma′nus de′i. A name of a resolvent plaster, which is described by Lemery. Also for opium.

Maple. See *Acer pseudoplatanus.*

Mara′nda. A species of myrtle, growing in the island of Ceylon, a decoction of the leaves of which is said to be excellent against the venereal disease.

MARA′NTA. 1. The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

2. The name of the Indian arrow-root.

There are three species of Maranta, the *Arundinacea*, *Galanga*, and *Comesa*, all of them herbaceous, perennial, exotics of the Indies, kept here in hot-houses for curiosity; they have thick, knotty, creeping roots, crowned with long, broad, arundinaceous leaves, ending in points, and upright stalks half a yard high, terminated by bunches of monopetalous, ringent, five-parted flowers. They are propagated by parting the roots in spring, and planting them in pots of light rich earth, and then plunging them in the bark-bed.

Mara′nta arundina′cea. The root of this species, commonly called arrow-root, is used by the Indians to extract the virus communicated by their poisoned arrows, from whence it has obtained its named. It is cultivated in gardens and provision-grounds in the West Indies; and the starch is obtained from it by the following process: The roots when a year old, are dug up, well washed in water, and then beaten in a large deep wooden mortar, to a pulp; this is thrown into a large tub of clean water: the whole is then well stirred, and the fibrous part wrung out by the hands, and thrown away. The milky liquor being passed through a hair sieve, or coarse cloth, is suffered to settle, and the clear water drained off. At the bottom of the vessel is a white mass, which is again mixed with clean water, and drained: lastly, the mass is dried on sheets in the sun, and is pure starch.

Arrow-root contains, in small bulk, a greater proportion of nourishment than any other yet known. The powder, boiled in water, forms a very pleasant transparent jelly, very superior to that of sago or tapioca: and is much recommended as a nutritious diet for children and invalids. The jelly is made in the following manner: to a dessert-spoonful of powder, add as much cold water as will make it into a paste; then pour on half a pint of boiling water: stir it briskly, and boil it a few minutes, when it will become a clear smooth jelly; a little sugar and sherry wine may be added for debilitated patients, but for infants a drop or two of essence of caraway-seeds, or cinnamon, is preferable, wine being very liable to become ascescent in the stomachs of infants, and thus disagree with the bowels. Fresh milk, either alone or diluted with water, may be substituted for the water. For very debilitated frames, and especially for ricketty children, this jelly, blended with an animal jelly, as that of the stag's-horn (*rasuræ cornu cervi*), affords a more nutritious diet than arrow-root alone, which may be done in the following manner: Boil half an ounce of stag's horn shavings, in a pint of water, for fifteen minutes; then strain, and add two dessert-spoonsful of arrow-root powder, previously well mixed with a tea-cupful of water; stir them briskly together, and boil them for a few minutes. If the child should be much troubled with flatulency, two or three drops of essence of caraway-seeds, or a little grated nutmeg may be added; but for adults, port wine, or brandy, will answer best.

Mara′nta Gala′nga. The smaller galangal. The roots of this plant are used medicinally; two kinds of galangal are mentioned in the pharmacopœias; the greater galangal obtained from the *Kæmpferia galanga*, of Linnæus, and the smaller galangal, the root of the *Maranta galanga; caulino simplici foliis lanceolatis subsessilibus*, of Linnæus. The dried root is brought from China, in pieces from an inch to two in length, scarcely half so thick, branched, full of knots and joints, with several circular rings, of a reddish-brown colour on the outside, and brownish within. It has an aromatic smell, not very grateful, and an unpleasant, bitterish, hot, biting taste. It was formerly much used as a warm stomachic bitter, and generally ordered in bitter infusions. It is now, however, seldom employed.

MARA′SMUS. (From μαραινω, to grow lean.) *Atrophia.* Emaciation. A wasting away of the flesh, without fever or apparent disease. See *Atrophy.*

Marathri′tes. (From μαραθρον, fennel.) A vinous infusion of fennel; or wine impregnated with fennel.

Marathrophy′llum. (From μαραθρον, fennel, and φυλλον, a leaf; so named because its leaves resemble those of the common fennel. See *Peucedanum officinale*.

Mara′thrum. (From μαραινω, to wither; so called because its stalk and flowers wither in the autumn.) See *Anethum fœniculum*.

Mara′thrum sylve′stre. See *Peucedanum*.

Marble. Powdered marble, which is a carbonate of lime, is used in pneumatic medicine, to give out carbonic acid gas.

Marcasite. See *Bismuth*.

Marcasi′ta. (From *marcasite*, Germ.) See *Bismuth*.

Marcha′ntia polymo′rpha. The systematic name of the liver-wort. *Hepatica terrestris. Jecoraria.* This plant is very common in this country. It has a penetrating though mild pungency, and bitter taste, sinking, as it were, into the tongue. It is recommended as an aperient, resolvent, and antiscorbutic, and, though seldom used in this country, appears to be a plant of no inconsiderable virtue.

MARCO′RES. (From *marceo*, to become lean.) Universal emaciation. The first order in the class *cachexiæ*, of Cullen's Nosology.

Marestail. See *Hippuris vulgaris*.

MARGARI′TA. (From *margalith*, Rab.)

1. The pearl. *Perla. Unio.* A small, calcareous concretion, of a bright transparent whiteness, found on the inside of the shell, *Concha margaritifera*, of Linnæus, or mother-of-pearl fish. Pearls were formerly exhibited as antacids.

2. A tumour upon the eye resembling a pearl.

Marigold, marsh. *Caltha palustris*, of Linnæus. The flower-buds of this very common plant may be pickled as a good substitute for capers.

Marine acid. See *Muriatic acid*.

Marine salt. See *Sodæ murias*.

Maripe′ndam. A plant in the island of St. Domingo: its tops are distilled, and thus a water is obtained, which is held in great esteem against pains in the stomach.

Mari′sca. An excrescence about the anus, or the piles in a state of tumefaction, the *Hæmorrhois tumens*, of Cullen.

Mari′sicum. The mercurialis fruticosa.

Marjoram, sweet. See *Origanum marjorana*.

Marjoram, wild. See *Origanum*.

Marjora′na. See *Origanum*.

Marmalade. The pulp of quinces, or any other fruit, boiled into a consistence with honey.

Marmary′gæ. (From μαρμαιρω, to shine.) An appearance of sparks, or coruscations, flashing before the eyes.

Marmola′ria. (From *marmor*, marble; so named because it is spotted like marble.) Bear's-breach. See *Acanthus mollis*.

Marmora′ta au′rium. (From *marmor*.) Ear-wax.

Marmorige. A variety of the *Pseudoblepsis Imaginaria*, in which sparks and flashes of fire are supposed to present themselves.

Marmo′reus ta′rtarus. The hardest species of *human calculus*.

Maroco′stinum. A purgative extract made of the marum and costus; originally made by Mindererus.

MARROW. *Medulla*, The fat substance secreted by the small arteries of its proper membrane; and contained in the medullary cavities of the long cylindrical bones. See *Bone*.

Marrow, spinal. See *Medulla spinalis*.

Marrubia′strum. Ballota, or stinking horehound.

MARRU′BIUM. (From *marrob*, a bitter juice, Heb.) Horehound.

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*.

2. The pharmacopœial name of the common white horehound. See *Marrubium vulgare*.

Marru′bium album. See *Marrubium vulgare*.

Marru′bium aly′sson. *Alyssum*. Madwort. It is supposed to be diaphoretic.

Marru′bium aqua′ticum. Water horehound; opening, corroborant.

Marru′bium Hispa′nicum. Mad-wort, or Spanish horehound. See *Marrubium verticillatum*.

Marru′bium ni′grum fœ′tidum. The black, stinking horehound, or ballota.

Marru′bium verticilla′tum. Marrubium hispanicum. The base horehound. Galen's mad-wort.

Marru′bium vulga′re. The systematic name of the common horehound. *Marrubium album. Marrubium dentibus calycinis setaceis uncinatis*, of Linnæus.—The leaves of this indigenous plant have a moderately strong smell of the aromatic kind, but not agreeable; which, by drying, is improved; and in keeping for some months is, in great part, dissipated: their taste is very bitter, penetrating, diffusive, and durable in the mouth. That horehound possesses some share of medicinal power, may be inferred from its sensible qualities; but its virtues do not appear to be clearly ascertained. It is a favourite remedy with the common people in coughs and asthmas. The usual dose is from half an ounce to an ounce, in infusion, two or three times a-day. The dose of the extract is from gr. x. to ʒss.

Mars. The alchemists gave this name to iron.

Mars alkaliza′tus solu′bilis. Iron and fixed alkali.

Mars sacchara′tus. Iron mixed with starch and melted sugar.

Mars solu′bilis. Ferrum tartarizatum.

Mars sulphura′tus. Iron filings, and sulphur deflagrated.

Marseilles hart-wort. See *Seseli tortuosum.*

Marsh-mallow. See *Althæa.*

Marsh trefoil. See *Menyanthes.*

Marsupia′lis. (*Marsupialis*, sc. *musculus*; from *marsupium*, a purse, so named from its resemblance.) See *Obturatur internus.*

Martagon lily. *Lilium martagon*, of Linnæus, who informs us the root makes part of the daily food of the Siberians.

Martial. Sometimes used to express preparations of iron, or such as are impregnated therewith; as the *Martial Regulus* of antimony, &c.

Martia′tum ungue′ntum. Soldiers' ointment. Ointment of laurel, rue, marjoram, &c.

Ma′rtis esse′ntia. A solution of lead in acid.

Ma′rtis limatu′ra præpara′ta. Purified filings of iron.

MARTYN, John, was born in 1699. His father, being in a mercantile station in London, he was intended to succeed in this, which he does not appear to have neglected; but his taste for literature led him to devote much of the night to study. His partiality, however, was particularly directed to botany, and he made many experiments on the germination of seeds, &c. When about 22 years of age, he became secretary of a botanical society, and proved one of its most active members: three years after, he was admitted into the Royal Society, and many of his papers appeared in the Philosophical Transactions, of which he subsequently took a part in the Abridgment. At what period he changed to the medical profession is not known. In 1726, he published his tables of officinal plants, disposed according to Ray's system. Having given public lectures on botany in London with much approbation, he was thought qualified to teach that science at Cambridge; and accordingly, in the following year, he delivered the first course ever heard in that university. In 1730, he entered at Emanuel college, with an intention of graduating in physic; but this was soon abandoned on his marriage, and from the necessary attendance to his profession in London. On the death of the botanical professor at Cambridge, Mr. Martyn was appointed to succeed him in the beginning of 1733; but he continued lecturing only two or three years, owing to the want of sufficient encouragement, and especially of a botanic garden there. In 1741, he published a splendid quarto edition of Virgil's Georgics, in which much new light was thrown on the natural history of that author, Dr. Halley having assisted him in the astronomical part; this was followed by the Bucolics, on the same plan. In 1752, he retired from practice, and about nine years after resigned his professorship in favour of his son, the Rev. Thomas Martyn; in consequence of whose election he presented his botanical library, of above 200 volumes, with his drawings, herbarium, &c. to the university. He died in 1768.

Ma′rum cre′ticum. See *Teucrium marum.*

Ma′rum Syri′acum. (From *mar*, bitter, Heb.) See *Teucrium marum.*

Ma′rum ve′rum. See *Teucrium marum.*

Ma′rum vulga′re. See *Thymus mastichina.*

Ma′rvisum. Malmsey wine.

Ma′schale. (Μασχαλη.) The arm-pit.

Maschali′ster. (From *μασχαλιςηρ.*) The second vertebra of the back.

Ma′slach. A medicine of the opiate kind, in use amongst the Turks.

Ma′speta. *Maspetum.* The leaves of the asafœtida plant.

MA′SSA. (From *μασσω*, to blend together.) A mass. A term generally applied to the compound out of which pills are to be formed.

Ma′ssa ca′rnea jaco′bi sy′lvii. See *Flexor longus digitorum pedis.*

Ma′ssalis. A name for mercury.

MASSE′TER. (From *μασσαομαι*, to chew; because it assists in chewing.) *Zigomato-maxillaire*, of Dumas. A muscle of the lower jaw, situated on the side of the face. It is a short, thick muscle, which arises, by fleshy and tendinous fibres, from the lower edge of the malar process of the maxillary bone, the lower horizontal edge of the os malæ, and the lower edge of the zygomatic process of the temporal bone, as far backwards as the eminence belonging to the articulation of the lower jaw. From some little interruption in the fibres of this muscle, at their origin, some writers describe it as arising by two, and others by three, distinct portions, or heads. The two layers of fibres of which it seems to be composed, cross each other as they descend, the external layer extending backwards, and the internal one slanting forwards. It is inserted into the basis of the coronoid process, and into all that part of the lower jaw which supports the coronoid and condyloid processes. Its use is to raise the lower jaw, and, by means of the above-mentioned decussation, to move it a little forwards and backwards in the act of chewing.

Massicot. Calcined white lead.

Ma′ssoy co′rtex. See *Cortex massoy.*

Masterwort. See *Imperatoria.*

MASTICATION. (*Masticatio*; from *mastico*, to chew.) Chewing. A natural function. The mixing together and dividing of the particles of the food in the mouth by the action of the jaws, tongue, lips, and cheeks. By means of this function, the food is lacerated and mixed with the saliva and the mucus of the mouth and fauces, and thus made into a bole of such a consistence as to be formed into a convenient size to be swallowed. See *Deglutition.*

MASTICATORIES. (*Masticatoria*, sc. *medicamenta*, from *mastico*, to chew.) Such medicines as are intended for chewing.

MA'STICHE. (From μασσω, to express.) See *Pistacia Lentiscus.*

Mastich-tree. See *Pistacia Lentiscus.*

Mastich, herb, common. See *Thymus mastichina.*

Mastich, herb, Syrian. See *Teucrium marum.*

Mastich, wood. See *Pistacia Lentiscus.*

Mastichelæ'um. (From μαςιχη, mastich, and ελαιον, oil.) Oil of mastich.

Masti'chia. (From μαςιχη, mastich; so called because it smells like mastich.) Nux virginiana, or mastich of ligon.

Masti'china. (Dim. of *mastiche.*) *Mastichina gallorum, marum,* or mastich thyme. See *Thymus mastichina.*

Masticot. See *Massicot.*

Ma'stix. See *Pistacia Lentiscus.*

MASTODY'NIA. (From μαςος, a breast, and οδυνη, pain.) Phlegmon of the breast of women. This disease may take place at any period of life, but it most commonly affects those who give suck. It is characterised by tumefaction, tension, heat, redness, and pain; and comes sometimes in both breasts, but most commonly in one. Pyrexia generally attends the disease. It is sometimes very quickly formed, and in general without any thing preceding to show it; but now and then a slight shivering is the forerunner. This disease terminates either in resolution, in suppuration, or schirrus. If the disease is left to itself, it generally terminates in suppuration.

The causes which give rise to this disease, are those which give rise to most of the phlegmasiæ, as cold, violent blows, &c. In women who are lying-in, or giving suck, it mostly arises either from a suppression of the lochia or a retention of milk. Mastodynia is often of long continuance; it is a very painful disease, but it is seldom fatal, unless when absolutely neglected, when it may run into scirrhus, and finally cancer. The termination of the disease by gangrene is never to be apprehended, at least few, if any, have seen the disease terminate in this way.

MASTOID. (*Mastoideus;* from μαςος, a breast, and ειδος, resemblance.) 1. Those processes of bones are so termed that are shaped like the nipple of the breast.

2. The name of a muscle which is inserted into the mastoid process.

Mastoide'um fora'men. A hole in the temporal bone of the skull.

Mastoide'us latera'lis. A name for the complexus.

Mastoide'us. (From μαςοιδης, the mastoid process.) See *Sterno-cleido-mastoideus.*

Matali'sta ra'dix. A root said to be imported from America, where it is given as a purgative, its action being rather milder than that of jalap.

MA'TER. (Ματηρ, a mother.) Two membranes of the brain had this epithet given them, by the Arabians, who thought they gave origin to all other membranes of the body. See *Dura mater* and *Pia mater.* Also a name of the herb mugwort, because of its virtue in disorders of the womb.

Ma'ter du'ra. See *Dura mater.*

Ma'ter herba'rum. Artemisia, or common mugwort.

Ma'ter metallo'rum. Quicksilver.

Ma'ter perla'rum. Mother of pearl. The concha margaritifera.

Ma'ter pi'a. See *Pia mater.*

Mate'ria perla'ta. If, instead of crystalizing the salts contained in the liquor separated from diaphoretic antimony, an acid be poured into it, a white precipitate is formed, which is nothing else but a very refractory calx of antimony.

Materiatu'ra. Castellus explains *morbi materiaturæ* to be diseases of intemperance.

MATE'RIA ME'DICA. By this term is understood a general class of substances, both natural and artificial, which are used in the cure of diseases.

Cartheuser, Newman, Lewis, Gleditsch, Linnæus, Vogel, Alston, and other writers on the Materia Medica, have been at much labour to contrive arrangements of these articles. Some have arranged them according to their natural resemblances; others according to their real or supposed virtues; others according to their active constituent principles. These arrangements have their peculiar advantages. The first may be preferred by the natural historian, the second by the physiologist, and the last by the chemist. The pharmacopœias published by the Colleges of Physicians of London, Dublin, and Edinburgh, have the articles of the Materia Medica arranged in alphabetical order; this plan is also adopted by almost all the continental pharmacopœias.

Dr. Cullen has arranged the Materia Medica as follows; —

- **Nutriments,** which are
  - Food,
  - Drinks,
  - Condiments;
- **Medicines** which act on the
  - Solids,
    - Simple, as
      - *Astringents,*
      - *Tonics,*
      - *Emollients,*
      - *Corrosives;*
    - Living, as
      - *Stimulants,*
      - *Sedatives,*
        - *Narcotics,*
        - *Refrigerants,*
      - *Antispasmodics.*
  - Fluids,
    - Producing a change of fluidity,
      - *Attenuants,*
      - *Inspissants.*
    - Mixture,
      - Correctors of Acrimony,
        - *Demulcents,*
        - *Antacids,*
        - *Antalkalines,*
        - *Antiseptics.*
    - Evacuants; viz.
      - *Errhines,*
      - *Sialagogues,*
      - *Expectorants,*
      - *Emetics,*
      - *Cathartics,*
      - *Diuretics,*
      - *Diaphoretics,*
      - *Emmenagogues.*

The following is the list of articles which come under the preceding classes: —

I. NUTRIMENTS.

- α. **Fruits.**
  - a. *Fresh, sweet, acidulous,* as
    - Prunes
    - Oranges
    - Lemons
    - Raspberries
    - Red and black currants
    - Mulberries
    - Grapes, &c.
  - b. *Dried, sweet, acidulous,* as
    - Raisins
    - Currants
    - Figs.
- β. **Oleraceous Herbs.**
  - Water-cresses
  - Dandelion
  - Parsley
  - Artichoke.
- γ. **Roots,**
  - Carrot
  - Garlick
  - Satyrion.
- δ. **Seeds and Nuts,**
  - Almonds, sweet and bitter
  - Walnuts
  - Olives.

II. MEDICINES.

- 1. **Astringents.**
  - Red rose
  - Cinquefoil
  - Tormentil
  - Madder
  - Sorrel
  - Water-dock
  - Bistort
  - Fern
  - Pomgranate
  - Oak-bark
  - Galls
  - Logwood
  - Quince
  - Mulberry
  - Sloe
  - Gum-arabic
  - Catechu
  - Dragon's blood
  - Alkanet
  - Balaustine flower
  - St. John's wort
  - Millefoil
  - Plantain
  - Convallaria
  - Bear's berry.
- 2. **Tonics.**
  - Gentian
  - Lesser centaury
  - Quassia
  - Simarouba
  - Marsh trefoil
  - Fumitory
  - Camomile
  - Tansy
  - Wormwood
  - Southernwood
  - Sea-wormwood
  - Water-germander
  - Virginian snake-root
  - Leopard's bane
  - Peruvian bark.
- 3. **Emollients.**
  - *Columniferous,*
    - Marsh mallow
    - Mallow.
  - *Farinaceous,*
    - Quince-seeds
    - Fænugreek-seed
    - Linseed.
  - *Various emollients,*
    - Pellitory
    - Verbascum
    - White lily.

4. Corrosives.
5. Stimulants.
Verticillated,
Lavender
Balm
Marjoram
Sweet marjoram
Syrian herb mastich
Rosemary
Hyssop
Ivy
Mint
Peppermint
Pennyroyal
Thyme
Mother of thyme
Sage.
Umbellated,
Fennel
Archangel
Anise
Caraway
Coriander
Cumin
Dill
Saxifrage.
Siliquose,
Horse-radish
Water-cress
Mustard
Scurvy-grass.
Alliaceous,
Garlick.
Coniferous,
Fir
Juniper.
Balsamics,
Venice turpentine
Common turpentine
Canada balsam
Copaiba balsam
Tolu balsam
Balm of Gilead.
Resinous,
Guaiacum
Ladanum
Storax
Benzoin.
Aromatics,
Cinnamon
Nutmeg
Mace
Clove
Allspice
Canella
Cascarilla
Black pepper
Long pepper
Indian pepper
Ginger
Lesser cardamom
Zedoary
Virginian snake-root
Ginseng
Aromatic reed.
Acrids,
Wake-robin
Pellitory
Stavesacre.
6. Narcotics.
Rhœadaceous,
White poppy
Red poppy.
Umbellated,
Hemlock
Water hemlock.
Solanaceous,
Belladonna
Henbane
Tobacco
Bitter sweet
Stramonium.
Varia,
Laurel
Camphor
Saffron
Wine.
7. Refrigerants.
Fruits of plants
Acidulous herbs and roots.
8. Antispasmodics.
Fœtid herbs,
Worm-wood
Fœtid goosefoot
Cumin
Pennyroyal
Rue
Savine.
Fœtid gums,
Asafœtida
Galbanum
Opopanax
Valerian.
9. Diluents.
Water.
10. Attenuants.
Alkalis
Sugar
Liquorice
Dried fruits.
11. Inspissants.
Acids
Farinaceous and mucilaginous demulcents.
12. Demulcents.
Mucilaginous,
Gum arabic
—— tragacanth.
Farinaceous,
as
Starch.
Bland oils.
13. Antacids.
Alkalis and earths.
14. Antalkalines.
Acids.
15. Antiseptics.
Acid parts of plants
Acescent herbs
Sugar
Siliquose plants
Alliaceous plants
Astringents
Bitters
Aromatics
Essential oils
Camphor
Gum resins
Saffron
Contrayerva
Valerian
Opium
Wine.
16. Errhines.
Asarabacca
White hellebore
Water iris
Pellitory.
17. Sialagogues.
Archangel
Cloves
Masterwort
Tobacco
Pepper
Pellitory.
18. Expectorants.
Ivy
Horehound
Pennyroyal
Elecampane
Florentine oris-root
Tobacco
Squill
Coltsfoot
Benzoin
Storax
Canada balsam
Tolu balsam.
19. Emetics.
Asarabacca
Ipecacuan
Tobacco
Squill
Mustard
Horse-radish
Bitters.
20. Cathartics.
Milder,
Mild acid fruits
Cassia pulp
Tamarind
Sugar
Manna
Sweet roots
Bland oils
Damask rose
Violet
Polypody
Mustard
Bitters
Balsamics.
Acrid,
Rhubarb
Seneka
Broom
Elder
Castor oil
Senna
Black hellebore
Jalap
Scammony
Buckthorn
Tobacco
White hellebore

Coloquintida
Elaterium.

21. Diuretics.
Parsley
Carrot
Fennel
Pimpinel
Eryngo
Madder
Burdock
Bitter-sweet
Wake-robin
Asarabacca
Foxglove
Tobacco
Rue
Savine
Snake-root
Squill
Bitters
Balsamics
Siliquosæ
Alliaceæ.

22. Diaphoretics.
Saffron
Bitter-sweet
Opium
Camphor
Contrayerva
Serpentaria
Sage
Water germander
Guaiacum
Sassafras
Seneka
Vegetable acids
Essential oil
Wine
Diluents.

23. Emmenagogues.
Aloes
Fœtid gums
Fœtid plants
Saffron.

The following is the arrangement of the Materia Medica, according to J. Murray, in his Elements of Materia Medica and Pharmacy.

A. General stimulants.
a. Diffusible { Narcotics
Antispasmodics.
b. Permanent { Tonics
Astringents.
B. Local stimulants. Emetics
Cathartics
Emmenagogues
Diuretics
Diaphoretics
Expectorants
Sialagogues
Errhines
Epispastics.
c. Chemical remedies. Refrigerants
Antacids
Lithontriptics
Escharotics.
D. Mechanical remedies. Anthelmintics
Demulcents
Diluents
Emollients.

Under the head of Narcotics are included—

Alkohol. Ether. Camphor. Papaver somniferum. Hyoscyamus niger. Atropa belladona. Aconitum napellus. Conium maculatum. Digitalis purpurea. Nicotiana tabacum. Lactuca virosa. Datura stramonium. Rhododendron chrysanthemum. Rhus toxicodendron. Arnica montana. Strychnos nux vomica. Prunus lauro-cerasus.

Under the second class, Antispasmodics, are included—Moschus. Castoreum. Oleum animale empyreumaticum. Petroleum. Ammonia. Ferula asafœtida. Sagapenum. Bubon galbanum. Valeriana officinalis. Crocus sativus. Melaleuca leucadendron.

Narcotics used as Antispasmodics—
Ether. Camphor. Opium.

Tonics used as Antispasmodics—
Cuprum. Zincum. Hydrargyrus. Cinchona.

The head of Tonics embraces—

1. From the *mineral* kingdom,

Hydrargyrus. Ferrum. Zincum. Cuprum. Arsenicum. Barytes. Calx. Acidum. Nitricum. Oxy-murias potassæ.

2. From the *vegetable* kingdom,

Cinchona officinalis. Cinchona caribæa. Cinchona floribunda. Cusparia. Aristolochia serpentaria. Dorstenia contrayerva. Croton eleutheria. Calumba. Quassia excelsa. Quassia Simarouba. Swietenia febrifuga. Swietenia mahagoni. Gentiana lutea. Anthemis nobilis. Artemisia absinthium. Chironia centaurium. Marrubium vulgare. Menyanthes trifoliata. Centaurea benedicta. Citrus aurantium. Citrus medica. Laurus cinnamomum. Laurus cassia. Canella alba. Acorus calamus. Amomum zinziber. Kæmferia rotunda. Santalum album. Pterocarpus santalinus. Myristica moschata. Caryophyllus aromaticus. Capsicum annuum. Piper nigrum. Piper longum. Piper cubeba. Myrtus pimenta. Amomum repens. Carum carui. Coriandrum sativum. Pimpinella anisum. Anethum fæniculum. Anethum graveolens. Cuminum cyminum. Angelica archangelica. Mentha piperita. Mentha viridis. Mentha pulegium. Hyssopus officinalis.

The class of Astringents comprehends the following:—

1. From the *vegetable* kingdom,

Quercus robur. Quercus cerris. Tormentilla erecta. Polygonum bistorta. Anchusa tinctoria. Hæmatoxylon campechianum. Rosa gallica. Arbutus uva ursi. Mimosa catechu. Kino. Pterocarpus draco. Ficus indica. Pistachia lentiscus.

2. From the *mineral* kingdom,

Acidum sulphuricum. Argilla. Super sulphas argillæ et potassæ. Calx. Carbonas calcis. Plumbum. Zincum. Ferrum. Cuprum.

The articles which come under the head of Emetics, are

1. From the *vegetable* kingdom.

Callicocca ipecacuanha. Scilla maritima. Anthemis nobilis. Sinapis alba. Asarum Europæum. Nicotiana tabacum.

2. From the *mineral* kingdom,

Antimonium. Sulphas zinci. Sulphas cupri. Subacetas cupri. Ammonia. Hydro-sulphuretum ammoniæ.

Cathartics include

Laxatives. Manna. Cassia fistula. Tamarindus Indica. Ricinus communis. Sulphur. Magnesia.

Purgatives. Cassia senna. Rheum palmatum. Convolvulus jalapa. Helleborus niger. Bryonia alba. Cucumis colocynthis. Momordica elaterium. Rhamnus catharticus. Aloe perfoliata. Convolvulus scammonia. Gambojia gutta. Submurias hydrargyri. Sulphas magnesiæ. Sulphas sodæ. Sulphas potassæ. Supertartras potassæ. Tartras potassæ et sodæ. Murias sodæ. Terebinthina veneta. Nicotiana tabacum.

The medicines arranged under Emmenagogues, are:

1. From the class of Antispasmodics.

Castoreum. Ferula asafœtida. Bubon galbanum.

2. From the class of Tonics.

Ferrum. Hydrargyrus. Cinchona officinalis.

3. From the class of Cathartics.

Aloe. Helleborus niger. Sinapis alba. Rosmarinus officinalis. Rubia Tinctorum. Ruta graveolens. Juniperus sabina.

The class of Diuretics includes,

1. Saline diuretics.

Supertartras potassæ. Nitras potassæ. Murias ammoniæ. Acetas potassæ. Potassa.

2. From the *vegetable* kingdom,

Scilla maritima. Digitalis purpurea. Nicotiana tabacum. Solanum dulcamara. Lactuca virosa. Colchicum autumnale. Gratiola officinalis. Spartium scoparium. Juniperus communis. Copaifera officinalis. Pinus balsamea. Pinus larix.

3. From the *animal* kingdom,

Meloe vesicatorius.

Under the class Diaphoretics are,

Ammonia. Murias ammoniæ. Acetas ammoniæ. Citras ammoniæ. Submurias hydrargyri. Antimonium. Opium. Camphor. Guaiacum officinale. Daphne mezereum. Smilax sarsaparilla. Laurus sassafras. Cochlearia armoracia. Salvia officinalis.

The class Expectorants comprehends,

Antimonium. Ipecacuanha. Nicotiana tabacum. Digitalis purpurea. Scilla maritima. Allium sativum. Polygala senega. Ammoniacum. Myrrha. Styrax benzoin. Styrax officinalis. Toluifera balsamum. Myroxylon peruiferum. Amyris gileadensis.

The articles of the class Sialagogues are, Hydrargyrus. Anthemis pyrethrum. Arum maculatum. Amomum zinziber. Daphne mezereum. Nicotiana tabacum.

The class of Errhines are, Iris florentina. Æsculus hippocastanum. Origanum majorana. Lavendula spica. Asarum Europæum. Veratrum album. Nicotiana tabacum. Euphorbia officinalis.

In the class Epispastics, and Rubefacients are, Meloe vesicatorius. Ammonia. Pix Burgundica. Sinapis alba. Allium sativum.

Refrigerants are constituted by the following articles. Citrus aurantium. Citrus medica. Tamarindus Indica. Acidum acetosum. Supertartras potassæ. Nitras potassæ. Boras sodæ.

The list of articles that come under the class Antacids are, Potassa. Soda. Ammonia. Calx. Carbonas calcis. Magnesia.

In the class Lithontriptics are, Potassa. Carbonas potassæ. Soda. Carbonas sodæ. Sapo albus. Calx.

In the class Escharotics are, Acida mineralia. Potassa. Nitras argenti. Murias antimonii. Sulphas cupri. Acetas cupri. Murias hydrargyri. Subnitras hydrargyri. Oxydum arsenici album. Juniperus sabina.

In the class Anthelmintics are, Dolichos pruriens. Ferri limatura. Stannum pulveratum. Olea Europæa. Artemisia santonica. Spigelia marilandica. Polypodium filix mas. Tanacetum vulgare. Geoffrœa inermis. Gambojia gutta. Submurias hydrargyri.

Demulcents are, Mimosa nilotica. Astragalus tragacantha. Linum usitatissimum. Althæa officinalis. Malva sylvestris. Glycyrrhiza glabra. Cycas circinalis. Orchis mascula. Maranta arundinacea. Triticum hybernum. Ichthyocolla. Olea Europæa. Amygdalus communis. Sevum ceti. Cera.

Water is the principal article of the class Diluents: and as for the last class, Emollients, heat conjoined with moisture is the principal, though all unctuous applications may be included.

The New London Pharmacopœia presents us with the following list for the Materia Medica: —

Abietis resina
Absinthium
Acaciæ gummi
Acetosæ folia
Acetosella
Acetum
Acidum sulphuricum
Aconiti folia
Adeps
Ærugo
Allii radix
Aloes spicatæ }
Aloes vulgaris } extractum
Althææ folia et radix
Alumen
Ammoniæ murias
Ammoniacum
Amygdala amara et dulcis
Amylum
Anethi semina
Anisi semina
Anthemidis flores
Antimonii sulphuretum
Argentum
Armoraciæ radix
Arsenici oxydum
Asari folia
Asafœtidæ gummi resina
Avenæ semina.
Aurantii baccæ

Aurantii cortex
Balsamum Peruvianum
Balsamum Tolutanum
Belladonnæ folia
Benzoinum
Bistorta
Cajuputi oleum
Calamina
Calami radix
Calumbæ radix
Camphora
Canellæ cortex
Capsici baccæ
Carbo ligni
Cardamines flores
Cardamomi semina
Caricæ fructus
Carui semina
Caryophylli
Caryophyllorum oleum
Cascarillæ cortex
Cassiæ pulpa
Castoreum
Catechu extractum
Centaurii cacumina
Cera alba
Cera flava
Cerevisiæ fermentum
Cetaceum
Cinchonæ lancifoliæ, cordifoliæ et oblongifoliæ cortex
Cinnamomi cortex
Cinnamomi oleum
Coccus
Colchici radix
Colocynthidis pulpa
Conii folia
Contrayervæ radix
Copaiba
Coriandri semina
Cornua
Creta
Croci stigmata
Cumini semina
Cupri sulphas
Cuspariæ cortex
Cydoniæ semina
Dauci radix
Dauci semina
Digitalis folia
Dolichi pubes
Dulcamaræ caulis
Elaterii poma
Elemi
Euphorbiæ gummi resina
Farina
Ferrum
Filicis radix
Fucus
Galbani gummi resina
Galla
Gentianæ radix
Glycyrrhizæ radix
Granati cortex
Guaiaci resina et lignum
Hæmatoxyli lignum
Hellebori fœtidi folia
Hellebori nigri radix
Hordei semina
Humuli strobili
Hydrargyrum
Hyoscyami folia et semina
Jalapæ radix
Ipecacuanhæ radix
Juniperi baccæ et semina
Kino
Lapis calcareus
Lavendulæ flores
Lauri baccæ et folia
Lichen
Limones
Limonum cortex et oleum
Linum catharticum
Lini usitatissimi semina
Lytta
Magnesiæ sulphas
Malva
Manna
Marrubium
Mastiche
Mel
Mentha piperita
Mentha viridis
Menyanthes
Mezerei cortex
Mori baccæ
Moschus
Myristicæ nuclei et oleum expressum
Myrrha
Olibanum
Olivæ oleum
Opium
Opopanacis gummi resina
Origanum
Ovum
Papaveris capsulæ
Petroleum
Pimentæ baccæ
Piperis longi fructus
Piperis nigri baccæ
Pix arida
Pix liquida
Plumbi subcarbonas
Plumbi oxydum semivitreum
Porri radix
Potassæ nitras
Potassæ supertartras
Potassa impura
Pruna
Pterocarpi lignum
Pulegium
Pyrethri radix
Quassiæ lignum
Quercûs cortex
Resina flava
Resina nigra
Rhamni baccæ
Rhei radix
Rhœados petala
Ricina semini et oleum
Rosæ caninæ pulpa
Rosæ centifoliæ petala
Rosæ gallicæ petala
Rosmarini cacumina
Rubiæ radix
Rutæ folia
Sabinæ folia
Saccharum
Salicis cortex
Sambuci flores
Sapo durus et mollis
Sarsaparillæ radix
Sassafras lignum et radix
Scammoneæ gummi resina
Scillæ radix
Senegæ radix
Sennæ folia
Serpentariæ radix
Sevum
Simároubæ cortex
Sinapis semina
Sodæ murias
Sodæ subboras
Sodæ sulphas
Soda impura
Spartii cacumina
Spigeliæ radix
Spiritus rectificatus et tenuis
Spongia
Stannum
Staphisagriæ semina
Styracis balsamum
Succinum
Sulphur et sulphur sublimatum
Tabaci folia
Tamarindi pulpa
Taraxaci radix
Tartarum
Terebinthina Canadensis et Chia
Terebinthina vulgaris
Terebinthinæ oleum
Testæ
Tormentillæ radix
Toxicodendri folia
Tragacantha
Tussilago
Valerianæ radix
Veratri radix
Vinum
Ulmi cortex
Uvæ passæ
Uvæ ursi folia
Zincum
Zingiberis radix

MATLOCK. A village in Derbyshire affords a mineral water of the acidulous class; its abundant springs issue from a lime-stone rock, near the banks of the Derwent. Several of these springs possess a temperature of 66°. Matlock water scarcely differs from common good spring water, in sensible properties. It is extremely trans-

parent, and exhales no vapour, excepting in cold weather. It holds little or no excess of aërial particles; it curdles soap, when first taken up, but it loses this effect upon long keeping, perhaps from the deposition of its calcareous salts: it appears to differ very little from good spring water when tasted; and its effects seem referrible to its temperature. It is from this latter circumstance that it forms a proper tepid bath for the nervous and irritable, and those of a debilitated constitution; hence it is usually recommended after the use of Bath and Buxton waters, and as preparatory to sea-bathing.

Matrica'lia. (From *matrix*, the womb.) Medicines appropriated to disorders of the uterus.

MATRICA'RIA. (From *matrix*, the womb; so called from its uses in disorders of the womb.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*.

2. The pharmacopœial name of the Matricaria parthenium. See *Matricaria parthenium*.

Matrica'ria chamomi'lla. *Chamæmelum vulgare. Chamomilla nostras. Leucanthemum*, of Dioscorides. Common wild corn, or dog's camomile. The plant directed under this name in the pharmacopœias, is the *Matricaria chamomilla:—receptaculis conicis radiis patentibus; squamis calycinis, margine æqualibus*, of Linnæus Its virtues are similar to those of the *parthenium*, but in a much inferior degree.

Matrica'ria parthe'nium. The systematic name of the fever-few. *Parthenium febrifuga*. Common fever-few, or febrifuge, and often, but very improperly, feather-few. Mother's wort. The leaves and flowers of this plant, *Matricaria parthenium:—foliis compositis, planis; foliolis ovatis, incisis; pedunculis ramosis*, have a strong, not agreeable smell, and a moderately bitter taste, both which they communicate by warm infusion, to water and rectified spirit. The watery infusions, inspissated, leave an extract of considerable bitterness, and which discovers also a saline matter, both to the taste, and in a more sensible manner by throwing up to the surface small crystalline efflorescences in keeping. The peculiar flavour of the matricaria exhales in the evaporation, and impregnates the distilled water, on which also a quantity of essential oil is found floating. The quantity of spirituous extract, according to Cartheuser's experiments, is only about one-sixth the weight of the dry leaves, whereas the watery extract amounts to near one-half. This plant is evidently the *Parthenium* of Dioscorides, since whose time it has been very generally employed for medical purposes. In natural affinity, it ranks with camomile and tansy, and its sensible qualities show it to be nearly allied to them in its medicinal character. Bergius states its virtues to be tonic, stomachic, resolvent, and emmenagogue. It has been given successfully as a vermifuge, and for the cure of intermittents; but its use is most celebrated in female disorders, especially in hysteria; and hence it is supposed to have derived the name matricaria. Its smell, taste, and analysis, prove it to be a medicine of considerable activity; we may, therefore, say, with Murray—*Rarius hodie præscribitur, quam debetur.*

Matrisy'lva. See *Asperula*.

MA'TRIX. (Ματηρ.) The womb. See *Uterus*.

Matrona'lis. (From *matrona*, a matron; so called because its smell is grateful to women.) The violet.

MATTHIOLUS, Peter Andrew, was born at Sienna in 1501. He went to study the law at Padua; but disliking that pursuit, he turned his attention to medicine. His father's death interrupted him in his progress; but having conciliated the good opinion of the professors, the degree of doctor was conferred upon him before his departure. He speedily found ample employment in his native place, but afterwards went to Rome, and in 1527 to the court of the prince bishop of Trent. During his residence of fourteen years there, he acquired such general esteem, that on his removal, men, women, and children, accompanied him, calling him their father and benefactor. At Gorizia, where he then settled as public physician, he likewise experienced a signal mark of gratitude; a fire having consumed all his furniture, the people flocked to him next day with presents, which more than compensated his loss, and the magistrates advanced him a year's salary. After twelve years, he accepted an invitation to the Imperial court, where he was highly honoured, and created aulic counsellor: but finding the weight of age pressing upon him, he retired to Trent, where he shortly died of the plague in 1577. He left several works, chiefly relating to the virtues of plants: and that, by which he principally distinguished himself, was a Commentary on the writings of Dioscorides. This was first published in Italian, afterwards translated by him into Latin, with plates, and passed through numerous editions. He certainly contributed much to lay the foundation of botanical science, though he was not sufficiently scrupulous in consulting the original sources, and examining the plants themselves.

Matura'ntia. (From *maturo*, to ripen.) Medicines which promote the suppuration of tumours.

MATURATION. (*Maturatio*; from *maturo*, to make ripe.) A term in surgery, signifying that process which succeeds inflammation, by which pus is collected in an abscess.

Maudlin. See *Achillea ageratum.*

MAURICEAU, Francis, was born at Paris, where he studied surgery with great industry for many years, especially at the Hotel-Dieu. He had acquired so much experience in midwifery, before he commenced public practice, that he rose almost at once to the head of his profession. His reputation was farther increased by his writings, and maintained by his prudent conduct during a series of years; after which he retired into the country, and died in 1709. He published several works, relating to the particular branch of the art which he practised, containing a great store of useful facts, though not well arranged, nor free from the false reasoning prevalent in his time.

Mauro-ma'rson. See *Marrubium.*

MAXI'LLA. (From μασσαω, to chew.) The jaw.

MAXI'LLA INFE'RIOR. *Os maxillare inferius. Mandibula.* The maxilla inferior, or lower jaw, which, in its figure may be compared to a horse-shoe, is at first composed of two distinct bones; but these, soon after birth, unite together at the middle of the chin, so as to form only one bone. The superior edge of this bone has, like the upper jaw, a process, called the *alveolar* process. This, as well as that of the upper jaw, to which it is in other respects a good deal similar, is likewise furnished with cavities for the reception of the teeth. The posterior part of the bone, on each side, rises perpendicularly into two processes, one of which is called the *coronoid*, and the other the *condyloid* process. The first of these is the highest: it is thin and pointed; and the temporal muscle, which is attached to it, serves to elevate the jaw. The condyloid process is narrower, thicker and shorter than the other, terminating in an oblong, rounded head, which is formed for a moveable articulation with the cranium, and is received into the fore-part of the fossa described in the temporal bone. In this joint there is a moveable cartilage, which, being more closely connected to the condyle than to the cavity, may be considered as belonging to the former. This moveable cartilage is connected with both the articulating surface of the temporal bone and the condyle of the jaw, by distinct ligaments arising from its edges all round. These attachments of the cartilage are strengthened, and the whole articulation secured, by an external ligament, which is common to both, and which is fixed to the temporal bone, and to the neck of the condyle. On the inner surface of the ligament, which attaches the cartilage to the temporal bone, and backwards in the cavity, is placed what is commonly called the gland of the joint; at least the ligament is there found to be much more vascular than at any other part. At the bottom of each coronoid process, on its inner part, is a foramen, or canal, which extends under the roots of all the teeth, and terminates at the outer surface of the bone near the chin. Each of these foramina affords a passage to an artery, vein, and nerve, which send off branches to the several teeth.

This bone is capable of a great many motions. The condyles, by sliding from the cavity towards the eminences on each side, bring the jaw horizontally forwards, as in the action of biting; or the condyles only may be brought forwards, while the rest of the jaw is tilted backwards, as is the case when the mouth is open. The condyles may also slide alternately backwards and forwards from the cavity to the eminence, and *vice versâ;* so that while one condyle advances, the other moves backwards, turning the body of the jaw from side to side, as in grinding the teeth. The great use of the cartilages seems to be that of securing the articulation, by adapting themselves to the different inequalities in these several motions of the jaw, and to prevent any injuries from friction. This last circumstance is of great importance where there is so much motion, and accordingly this cartilage is found in the different tribes of carnivorous animals, where there is no eminence and cavity, nor other apparatus for grinding.

The alveolar processes are formed of an external and internal plate, united together by thin bony partitions, which divide the processes at the fore-part of the jaw, into as many sockets as there are teeth. But, at the posterior part, where the teeth have more than one root, each root has a distinct cell. These processes in both jaws, begin to be formed with the teeth, accompany them in their growth, and disappear when the teeth fall. So that the loss of the one seems constantly to be attended with the loss of the other.

MAXI'LLA SUPE'RIOR. *Os maxillare superius.* The superior maxillary bones constitute the most considerable portion of the upper jaw, are two in number, and generally remain distinct through life. Their figure is exceedingly irregular, and not easily to be described. On each of these bones are observed several eminences. One of these is at the upper and fore-part of the bone, and, from its making part of the nose, is called the *nasal* process. Internally, in the inferior portion of this process, is a fossa, which, with the os unguis, forms a passage for the lachrymal duct. Into this nasal process, likewise, is inserted the short round tendon of the *musculus orbicularis palpebrarum.* Backwards and outwards, from the root of the nasal process, the bone helps to form the lower side of the orbit, and this part is therefore called the *orbitar* process. Behind this orbitar process, the bone forms a considerable tuberosity, and, at the upper part of this tuberosity, is a channel, which is almost a complete hole. In this channel passes a branch of the fifth pair of nerves, which, together with a small artery, is transmitted to the face through the external orbiter foramen, which opens immediately under the orbit. Where the bone on each side is joined to the os malæ, and helps to form the cheeks, is observed what is called the *malar* process. The lower and anterior parts of the bone make a kind of circular sweep, in which are the *alveoli*, or sockets for the teeth; this is called the *alveolar* process. This alveolar process has posteriorly a considerable tuberosity on its internal surface. Above this alveolar process, and just behind the fore-teeth, is an irregular hole, called the *foramen incisivum*, which, separating into two, and sometimes more holes, serves to transmit small arteries and veins, and a minute branch of the fifth pair of nerves to the nostrils. There are two horizontal lamellæ behind the alveolar process, which, uniting together, form part of the roof of the mouth, and divide it from the nose. This partition, being seated somewhat higher than the lower edge of the alveolar process, gives the roof of the mouth a considerable hollowness. Where the ossa maxillaria are united to each other, they project somewhat forwards, leaving between them a furrow, which receives the inferior portion of the septum nasi. Each of these bones is hollow, and forms a considerable sinus under its orbitar part. This sinus, which is usually, though improperly, called *antrum Highmorianum*, is lined with the pituitary membrane. It answers the same purposes as the other sinuses of the nose, and communicates with the nostrils by an opening, which appears to be a large one in the skeleton, but which, in the recent subject, is much smaller. In the fœtus, instead of these sinuses, an oblong depression only is observed at each side of the nostrils, nor is the tuberosity of the alveolar process then formed. On the side of the palate, in young subjects, a kind of fissure may be noticed, which seems to separate the portion of the bone which contains the dentes incisores from that which contains the dentes canini. This fissure is sometimes apparent till the sixth year, but after that period it in general wholly disappears.

The ossa maxillaria not only serve to form the cheeks, but likewise the palate, nose, and orbits; and, besides their union with each other, they are connected with the greatest part of the bones of the face and cranium, viz. with the ossa nasi, ossa malarum, ossa unguis, ossa palati, os frontis, os sphenoides, and os ethmoides.

MAXILLARY ARTERIES. *Arteriæ maxillares.* These are branches of the external carotid. The *external maxillary* is the fourth branch of the carotid; it proceeds anteriorly, and gives off the facial or mental, the coronary of the lips, and the angular artery. The *internal maxillary* is the next branch of the carotid; it gives off the spheno-maxillary, the inferior alveolar, and the spinous artery.

MAXILLARY GLANDS. *Glandulæ maxillares.* The glands so called are conglomerate, and are situated under the angles of the lower jaw. The excretory ducts of these glands are called Warthonian, after their discoverer.

MAXILLARY NERVES. *Nervi maxillares.* The superior and inferior maxillary nerves are branches of the fifth pair, or trigemini. The former is divided into the spheno-palatine, posterior alveolar, and the infra-orbital nerve. The latter is divided into two branches, the internal lingual, and one, more properly, called the inferior maxillary.

May-lily. See *Convallaria majalis.*

May-weed. See *Anthemis cotula.*

MAYERNE, SIR THEODORE TURQUET DE, BARON D'AUBONNE, was born at Geneva in 1573, and graduated at Montpelier. He then went to Paris, and, by the influence of Riverius, was appointed in 1600 to attend the Duke de Rohan, in his embassy to the diet at Spire; and also one of the physicians in ordinary to Henry IV. On his return he settled in Paris as a physician, and gave lectures in anatomy and pharmacy, in which he strongly recommended various chemical remedies: this drew upon him the ill-will of the faculty, and he was anonymously attacked as an enemy to Hippocrates and Galen; whence in his "Apologia," he cleared himself from this imputation, making also some severe strictures on his opponents. They consequently issued a decree against consulting with him; but the esteem of the king supported him against this persecution, and he would have been appointed first physician, had he not refused to embrace the catholic religion. After the assassination of Henry IV. in 1610, he received an invitation from James I. of England, to whom he had been introduced three years before: he accepted the office of his first physician, and passed the remainder of his life in this country. He was admitted to the degree of doctor in both universities, and into the College of Physicians, and met with very general respect. He incurred some obloquy, indeed, on the death of the Prince of Wales, having differed in opinion from the other physicians; but his conduct obtained the written approbation of the king and council. He was knighted in 1624, and honoured with the appointment of physician to the two succeeding monarchs; and accumulated a large fortune by his extensive practice. He died in 1655, and bequeathed his library to the College of Physicians. Several papers, written by him, were published after his death; among which are the cases of many of his distinguished patients, very well drawn up.

MAYOW, John, was born in Cornwall in 1645. He studied at Oxford, and took a degree in civil law, but afterwards changed to medicine, which he practised chiefly at Bath; but he died in London at the age of 34. These are the only records of the life of a man, who went before his age in his views of chemical physiology, and anticipated, though obscurely, some of the most remarkable discoveries in pneumatic chemistry, which have since been made. He published at Oxford in 1669 two tracts, one on Respiration, the other on Rickets; which were reprinted five years after with three additional dissertations, one on the Respiration of the Fœtus in Utero et Ovo, another on Muscular Motion and the Animal Spirits, and the remaining one on Saltpetre and the Nitro-aërial Spirit. On this latter his claim above-mentioned chiefly rests, the existence of the nitro-aërial spirit being proved by many ingenious experiments, as a constituent of air, and of nitre, the food of life and flame, agreeing with the oxygen of modern chemists. Much vague speculation, indeed, occurs in the work: but he clearly maintains that this spirit is absorbed by the blood in the lungs, and proves the source of the animal heat, as also of the nervous energy and of muscular motion. He likewise anticipated the mode of operating with aërial fluids in vessels inverted over water, and transferring them from one to another.

Mays, Indian. See *Zea mays.*

Maw-worm. See *Ascaris.*

MEAD, Richard, was born near London in 1673. After studying some time at Leyden, and in different parts of Italy, he graduated at Padua in 1695. Then returning to his native country, he settled in practice, and met with considerable success. His first publication, "A Mechanical Account of Poisons," appeared in 1702, and displayed much ingenuity; though he afterwards candidly retracted some of his opinions, as inadequate to explain the functions of a living body. He was soon after elected a member of the Royal Society, and in the following year physician to St. Thomas's Hospital. In 1704 he published a treatise, maintaining the influence of the sun and moon on the human body, arguing from the Newtonian theory of the tides, and the changes effected by those bodies in the atmosphere. In 1707 he received a diploma from Oxford, and about four years after he was appointed to read the anatomical lectures at Surgeons' Hall, which he continued for some time with great applause. In 1714, on the death of his patron, Dr. Radcliffe, he took his house, and being then a fellow of the College of Physicians, and having been called into consultation in the last illness of Queen Anne, when he displayed superior judgment, he seems to have been regarded among the first of the profession, and soon after, from his extensive engagements, resigned his office at St. Thomas's Hospital. The plague raging at Marseilles in 1719, he was officially consulted on the means of prevention, which led to a publication, by him, in the following year, decidedly maintaining its infectious nature, which had been questioned in France, and recommending suitable precautions: this work passed rapidly through many editions. In 1721 he superintended the experiment of inoculating the small-pox in the persons of some criminals; and his report being favourable, the practice was rapidly diffused. He was soon after engaged in a controversy with Dr. Middleton, concerning the condition of physicians among the Romans, which was, however, carried on in a manner honourable to both parties. About the same period Dr. Freind having been committed to the Tower for his political sentiments, Dr. Mead obtained his liberation in a spirited manner, and presented him a considerable sum, received from his patients during his imprisonment. In 1727 he was appointed physician in ordinary to George II. and his professional occupations became so extensive, that he had no leisure for writing. It was not till 20 years after, therefore, that he printed his treatise on Small-pox and Measles, written in a pure Latin style, with a translation in the same language of Rhazes' Commentary on the former disease. In 1749 he published a treatise on the Scurvy, ascribing the disease to moisture and putridity, and recommending Mr. Sutton's ventilator, which was, in consequence of his interposition, received into the navy. His "Medicina Sacra," appeared in the same year, containing remarks on the diseases mentioned in the scriptures. His last work was a summary of his experience, entitled "Monita et Præcepta Medica," in 1751; it was frequently reprinted, and translated into English. His life terminated in 1754; and a monument was erected to him in Westminster Abbey. He distinguished himself not only in his profession, but he was the greatest patron of science and polite literature of his time; and he made an ample collection of scarce and valuable books, manuscripts, and literary curiosities; to which all respectable persons had free access.

Meadow-crowfoot. See *Ranunculus acris.*

Meadow, queen of the. See *Spiræa ulmaria.*

Meadow saffron. See *Colchicum.*

Meadow saxifrage. See *Peucedanum silaus.*

Meadow sweet. See *Spiræa ulmaria.*

Meadow thistle, round leaved. The leaves of this plant, *Cnicus oleraceus,* of Linnæus, are boiled, in the northern parts of Europe, and eaten as we do cabbage.

Measles. See *Rubeola.*

MEA'TUS AUDITO'RIUS EXTE'RNUS. See *Ear.*

MEA'TUS AUDITO'RIUS INTE'RNUS. The internal auditory passage is a small bony canal, beginning internally by a longitudinal orifice at the posterior surface of the petrous portion of the temporal bone, running towards the vestibulum and cochlea, and there being divided into two less cavities by an eminence. The superior and smaller of these is the orifice of the aqueduct of Fallopius, which receives the portio dura of the auditory nerve: the other inferior and larger cavity is perforated by many small holes, through which the portio mollis of the auditory nerve passes into the labyrinth.

Mea'tus cæ'cus. A passage in the throat to the ear, called Eustachian tube.

Mea'tus cuticula'res. The pores of the skin.

Mea'tus cy'sticus. The gall-duct.

MEA'TUS URINA'RIUS. In women, this is situated in the vagina, immediately below the symphysis of the pubes, and behind the nymphæ. In men, it is at the end of the glans penis.

Mecca balsam. See *Amyris Gileadensis.*

Mechoacan. See *Convolvulus mechoacanna.*

Mechoaca'nna. (From *Mechoacan,* a province in Mexico, whence it is brought.) See *Convolvulus Mechoacanna.*

Mechoaca'nna ni'gra. See *Convolvulus Jalapa.*

Me'con. (From μηκος, bulk; so named from the largeness of its head.) The papaver, or poppy.

Meco'nis. (From μηκων, the poppy; so called because its juice is soporiferous, like the poppy.) The lettuce.

Meco'nium. (From μηκων, the poppy.) 1. The inspissated juice of the poppy. Opium. 2. The green excrementitious substance that is found in the large intestines of the fœtus.

MEDIAN NERVE. The second branch of the brachial plexus.

MEDIAN VEINS. The situation of the veins of the arms is extremely different in different individuals. When a branch proceeds near the bend of the arm, inwardly from the basilic vein, it is termed the *basilic median;* and when a vein is given off from the cephalic in the like manner, it is termed the *cephalic median.* When these two veins are present, they mostly unite just below the bend of the arm, and the common trunk proceeds to the cephalic vein.

Media'num. The *Mediastinum.*

MEDIASTI'NUM. (*Quasi in medio stans,* as being in the middle.) The membranous septum, formed by the duplicature of the pleura, that divides the cavity of the chest into two parts. It is divided into an anterior and posterior portion.

Mediasti'num ce'rebri. The falciform process of the dura mater.

Me'dica. (From *Media,* its native soil.) A sort of trefoil.

Medica'go. (From *medica.*) The herb trefoil.

Medicamenta'ria. Pharmacy, or the art of making and preparing medicines.

MEDICAME'NTUM. (From *medico,* to heal.) A medicine.

Medica'ster. A false pretender to the knowledge of medicine; the same as quack.

Medici'na diæte'tica. The regulation of regimen, or the non-naturals.

Medici'na diaso'stica. That part of medicine which relates to preserving health.

Medici'na gymna'stica. That part of medicine which relates to exercise.

Medici'na herme'tica. The application of chemical remedies.

Medici'na prophyla'ctica. That part of medicine which relates to preserving health.

Medici'na tristi'tiæ. Common saffron.

MEDICINE. Any substance that is exhibited with a view to cure or allay the violence of a disease. It is also very frequently made use of to express the healing art, when it comprehends anatomy, physiology, and pathology.

Medicinal days. Such days are so called by some writers, wherein the crisis or change is expected, so as to forbid the use of medicines, in order to wait nature's effort, and require all the assistance of art to help forward, or prepare the humours for such a crisis: but it is most properly used for those days wherein purging, or any other evacuation, is most conveniently complied with.

Medicinal hours. Are those wherein it is supposed that medicines may be taken to the greatest advantage, commonly reckoned in the morning fasting, about an hour before dinner, about four hours after dinner, and at going to bed; but in acute cases, the times are to be governed by the symptoms and aggravation of the distemper.

MEDICINA'LIS. (From *medicina.*) Medicinal, having a power to restore health, or remove disease.

Medina. In Paracelsus it is a species of ulcer.

MEDINE'NSIS VE'NA. (*Medinensis;* so called because it is frequent at Medina.) *Dracunculus. Gordius medinensis,* of Linnæus. The muscular hair-worm. A very singular animal, which, in some countries, inhabits the cellular membrane between the skin and muscles. See *Dracunculus.*

MEDITU'LLIUM. (From *medius,* the middle.) See *Diploë.*

Me'dius ve'nter. The middle venter is the thorax, or chest.

Medlar. See *Mespilus.*

MEDU'LLA. (*Quasi in medio ossis.*) 1. The marrow. See *Marrow.*

2. The pith or pulp of vegetables.

3. The white substance of the brain is called medulla, or the medullary part, to distinguish it from the cortical.

Medu'lla ca'ssiæ. The pulp of the cassia fistularis.

MEDU'LLA OBLONGA'TA. The medullary substance that lies within the cranium, upon the basillary process of the occipital bone. It is formed by the connection of the crura cerebri and crura cerebelli, and terminates in the spinal marrow. It has several eminences, viz. pons varolii, corpora pyramidalia, and corpora olivaria.

MEDU'LLA SPINA'LIS. *Cerebrum elongatum. Æon.* The spinal marrow. A continuation of the medulla oblongata, which descends into the specus vertebralis from the foramen magnum occipitale, to the third vertebra of the loins, where it terminates in a number of nerves, which, from their resemblance, are called *cauda equina.* The spinal marrow is composed, like the brain, of a cortical and medullary substance: the former is placed internally. It is covered by a continuation of the dura mater, pia mater, and tunica arachnoidea. The use of the spinal marrow is to give off, through the lateral or intervertebral foramina, thirty pairs of nerves, called cervical, dorsal, lumbar, and sacral nerves.

MEDULLARY. (*Medullaris;* from *medulla,* marrow.) Like unto marrow.

MEDULLARY SUBSTANCE. The white or internal substance of the brain is so called.

Megalospla'nchnus. (From μεγας, great, and σπλαγχνον, a bowel.) Having some of the viscera enlarged, from schirrus or other cause.

Me'grim. A species of cephalalgia, or a pain generally affecting one side of the head, towards the eye, or temple, and arising from the state of the stomach.

MEIBOMIUS, Henry, was born at Lubeck in 1638. After studying in different universities he graduated at Angers, and afterwards was appointed professor of medicine at Helmstadt, where he continued till his death in 1700. He published several works, and commentaries on those of others. That which chiefly illustrates his name is entitled "De Vasis Palpebrarum novis," printed in 1666. He seems to have contemplated a history of medicine, and published a letter on the subject, which indeed his father had begun; but the difficulties, which he met with in investigating the medicine of the Arabians, arrested his progress.

MEIBOMIUS'S GLANDS. *Meibomii glandulæ.* The small glands which are situated between the conjunctive membrane of the eye and the cartilage of the eye-lid, first described by Meibomius.

MEL. See *Honey.*

Mel aceta'tum. See *Oxymel.*

Mel bora'cis. Honey of borax. "Take of borax, powdered, a drachm; clarified honey, an ounce. Mix." This preparation is found very useful in aphthous affections of the fauces.

Mel despuma'tum. Clarified honey. Melt honey in a water-bath, then remove the scum. See *Honey.*

Mel ro'sæ. Rose honey. "Take of red-rose petals, dried, four ounces; boiling water, three pints; clarified honey, five pounds. Macerate the rose petals in the water, for six hours, and strain; then add the honey to the strained liquor, and, by means of a water-bath, boil it down to a proper consistence." An admirable preparation for the base of various gargles and collutories. It may also be employed with advantage, mixed with extract of bark, or other medicines, for children who have a natural disgust to medicines.

Mel sci'llæ. See *Oxymel scillæ.*

Me'la. (From μαω, to search.) A probe.

MELÆ'NA. (From μελας, black.) The black vomit. The black disease. *Melaina nosos.* Hippocrates applies this name to two diseases. In the first, the patient vomits black bile, which is sometimes bloody and sour; sometimes he throws up a thin saliva; and at others a green bile, &c. In the second, the patient is as described in the article *Morbus niger.*

Melai'na no'sos. See *Melæna.*

MELALEU'CA. (From μελας, black, and λευκος, white, so named by Linnæus, because the principal, and indeed original, species was called *leucadendron,* and *arbor alba;* words synonimous with its appellation in the Malay tongue, *Caja-puti,* or white tree, but it is not known why the idea of black was associated with white.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Icosandria.*

Melaleu'ca leucade'ndron. The systematic name of the plant which is said to afford the cajeput oil. *Oleum cajeputæ. Oleum Wittnebianum. Oleum volatile melaleucæ. Oleum cajeput.* Thunberg says cajeput oil has the appearance of inflammable spirit, is of a green colour, and so completely volatile, that it evaporates entirely, leaving no residuum; its odour is of the camphoraceous kind, with a terebinthinate admixture. Goetz says it is limpid, or rather yellowish. It is a very powerful medicine, and in high esteem in India and Germany, in the character of a general remedy in chronic and painful diseases: it is used for the same purposes for which we employ the officinal ethers, to which it seems to have a considerable affinity; the cajeput, however, is more potent and pungent; taken into the stomach, in the dose of five or six drops, it heats and stimulates the whole system, proving, at the same time, a very certain diaphoretic, by which probably the good effects, it is said to have in dropsies and intermittent fevers, are to be explained. For its efficacy in various convulsive and spasmodic complaints, it is highly esteemed. It has also been used both internally and externally, with much advantage, in several other obstinate disorders: as palsies, hypochondriacal, and hysterical affections, deafness, defective vision, tooth-ache, gout, rheumatism, &c. The dose is from two to six, or even twelve drops. The tree which affords this oil, by distillation of its leaves, generally was supposed to be the *Melaleuca leucadendron*, of Linnæus, but it appears from the specimens of the tree producing the true oil, sent home from India, by Mr. Christopher Smith, that it is another species which is therefore named *Melaleuca cajaputi.*

Melamphy'llum. (From μελας, black, and φυλλον, a leaf; so named from the blackness of its leaf.) Bear's-breach. See *Acanthus mollis.*

Melampo'dium. (From *Melampus*, the shepherd who first used it.) Black hellebore.) See *Helleborus niger.*

Melanago'ga. (From μελας, black, and αγω, to expel.) Medicines which purge off black bile.

Melanchlo'rus. (Μελαγχλωρος.) A livid colour of the skin. The black jaundice.

MELANCHO'LIA. (From μελας, black, and χολη, bile; because the antients supposed that it proceeded from a redundance of black bile.) Melancholy madness. A disease in the class *Neuroses*, and order *Vesaniæ*, of Cullen, characterised by erroneous judgment, but not merely respecting health, from imaginary perceptions or recollection influencing the conduct and depressing the mind with ill-grounded fears; not combined with either pyrexia or comatose affections; often appearing without dyspepsia, yet attended with costiveness, chiefly in persons of rigid fibres and torpid insensibility. See *Mania.*

Melano'piper. (From μελας, black, and πεπερι, pepper.) Black pepper. See *Piper nigrum.*

Melanorrhi'zon. (From μελας, black, and ριζα, a root.) A species of hellebore with black roots.

Melante'ria. (From μελας, black; so called because it is used for blacking leather.) Green vitriol.

Melanthelæ'um. (From μελας, black, and ελαιον, oil.) Oil expressed from the black seeds of fennel flower.

Mela'nthium. (From μελας, black; so named from its black seed.) The herb fennel flower.

Me'las. (From μελας, black.) *Vitiligo nigra. Morphæa nigra. Lepra maculosa nigra.* A disease that appears upon the skin in black or brown spots, which very frequently penetrate deep, even to the bone, and do not give any pain, or uneasisiness. It is a disease very frequent in, and endemial to, Arabia, where it is supposed to be produced by a peculiar miasma.

Mela'sma. (From μελας, black.) *Melasmus.* A disease that appears not unfrequently upon the tibia of aged persons, in form of a livid black spot, which, in a day or two, degenerates into a very foul ulcer.

Melaspe'rmum. (From μελας, black, and σπερμα, seed.) See *Melanthium.*

Me'lca. (From αμελγω, to milk.) Milk. A food made of acidulated milk.

Me'le. (From μαω, to search.) A probe.

Melea'gris. (From *Meleager*, whose sisters were fabled to have been turned into this bird.) The guinea-fowl. Also a species of fritillaria, so called because its flowers are spotted like a guinea-fowl.

Melege'ta. *Meleguetta.* Grains of Paradise.

Melei'os. (From *Melos*, the island where it is made.) A species of alum.

Meli. (Μελι.) Honey.

Melice'ria. See *Meliceris.*

MELI'CERIS. (From μελι, honey, and κερος, wax.) An encysted tumour, whose contents resemble honey in consistence and appearance.

Meli'craton. (From μελι, honey, and κεραννυμι, to mix.) Hydromel. Mead. Wine impregnated with honey.

Meligei'on. (From μελι, honey.) A fœtid humour, discharged from ulcers attended with a caries of the bone, of the consistence of honey.

Melilot. See *Melilotus.*

Melilo'tus. (From μελι, honey, and λωτος, the lotus; so called from its smell, being like that of honey.) See *Trifolium.*

Melime'lum. (From μελι, honey, and μηλον, an apple; so named from its sweetness.) Paradise apple.

Meli'num. (From μελον, an apple.) Oil made from the flowers of the apple-tree.

Meliphy'llum. (From μελι, honey, and φυλλον, a leaf; so called from the sweet smell of its leaf, or because bees gather honey from it.) Baum, or balm. See *Melissa.*

MELI'SSA. (From μελισσα, a bee, because bees gather honey from it.) The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.* Balm.

Meli'ssa calami'ntha. The systematic

name of the common calamint. *Calamintha. Calamintha vulgaris. Calamintha officinarum. Melissa calamintha: pedunculis axillaribus, dichotomis, longitudine foliorum,* of Linnæus. This plant smells strongly like wild mint, though more agreeable; and is often used by the common people, in form of tea, against weakness of the stomach, flatulent colic, uterine obstructions, hysteria, &c.

Meli′ssa ci′trina. See *Melissa officinalis.*

Meli′ssa grandiflo′ra. The systematic name of the mountain calamint. *Calamintha magno flore. Calamintha montana.* Mountain calamint. This plant, *Melissa grandiflora,* of Linnæus, has a moderately pungent taste, and a more agreeable aromatic smell than the common calamint, and appears to be more eligible as a stomachic.

Meli′ssa Ne′peta. *Calamintha Anglica.* Field calamint. Spotted calamint. *Calamintha pulegii odore. Nepeta agrestis.* It was formerly used as an aromatic.

Meli′ssa officina′lis. The systematic name of balm. *Citrago. Citraria. Melissophyllum. Mellitis. Cedronella. Apiastrum. Melissa citrina. Erotion.* Balm. A native of the southern parts of Europe, but very common in our gardens. In its recent state, it has a roughish aromatic taste, and a pleasant smell of the lemon kind. It was formerly much esteemed in nervous diseases, and very generally recommended in melancholic and hypochondriacal affections; but, in modern practice, it is only employed when prepared as tea, as a grateful diluent drink in fevers, &c.

Meli′ssa tu′rcica. See *Dracocephalum moldavica.*

Melissophy′llum. (From μελισσα, baum, and φυλλον, a leaf.) Melissa, or baum. A species of horehound, with leaves resembling baum.

MELI′TTIS. (From μελιττα, which in the Attic dialect is the name of a bee; so that this word is, in fact, equivalent to *Melissa,* and was adopted by Linnæus, therefore, for the bastard balm.) The name of a genus of plants. Class, *Didynamia.* Order, *Gymnospermia.* Bastard balm.

Meli′ttis melissophy′llum. The systematic name of the mountain balm, or nettle. *Sophyllum.* This elegant plant, *Melittis melissophyllum,* of Linnæus, is seldom used in the present day; it is said to be of service in uterine obstructions and calculous diseases.

Meliti′smus. (From μελι, honey.) A linctus, prepared with honey.

Melitto′ma. (From μελι, honey.) A confection made with honey. Honey-dew.

Melizo′mum. (From μελι, honey, and ζωμος, broth.) Mead. A drink prepared with honey.

Mella′go. (From *mel,* honey.) Any medicine which has the consistence and sweetness of honey.

Mellilo′tus. See *Melilotus.*

Melli′na. (From *mel,* honey.) Mead. A sweet drink prepared with honey.

Melli′ta. (From *mel,* honey.) Preparations of honey.

Me′lo. The common melon. See *Cucumis melo.*

Meloca′rpus. (From μηλον, an apple, and καρπος, fruit; from its resemblance to an apple.) The fruit of the aristolochia, or its root.

Me′loe vesicato′rius. The Spanish fly, now called *lytta.*

Me′lon. (Μηλον.) A disorder of the eye, in which it protuberates out of the socket.

Melon, common. See *Cucumis melo.*

Melon, musk. See *Cucumis melo.*

Melon, water. See *Cucurbita citrullus.*

Melo′ngena. Improperly called *mala insana. Solanum pomiferum.* Mad apple. The Spaniards and Italians eat it in sauce and in sweat meats. The taste somewhat resembles citron.

Melo′sis. Μηλωσις. A term which frequently occurs in Hippocrates, De Capit. Vulner. for that search into wounds which is made by surgeons with the specillum, or probe.

Melo′tis. Μηλωτις. Used for the lesser specillum, and often for that particular instrument contrived to search or cleanse the ear with, more commonly called *Auriscalpium.*

Melo′thria pe′ndula. The systematic name of the small creeping cucumber plant. The inhabitants of the West Indies pickle the berries of this plant, and use them as we do capers.

Melyssophy′llum. (From μελισσα, balm, and φυλλον, a leaf.) Mountain balm. See *Melittis.*

MEMBRA′NA. See *Membrane.*

MEMBRA′NA HYALOIDE′A. *Membrana arachnoidea.* The transparent membrane which includes the vitreous humour of the eye.

MEMBRA′NA PUPILLA′RIS. A very delicate membrane of a thin and vascular texture, and an ash colour, arising from the internal margin of the iris, and totally covering the pupil, in the fœtus before the sixth month.

MEMBRA′NA RUYSCHIA′NA. The celebrated anatomist Ruysch discovered that the choroid membrane of the eye was composed of two laminæ. He gave the name of membrana ruyschiana to the internal lamina, leaving the old name of choroides to the external.

MEMBRA′NA TY′MPANI. The membrane covering the cavity of the drum of the ear, and separating it from the meatus auditorius externus. It is of an oval form, convex below the middle, towards the hollow of the tympanum, and concave towards the meatus auditorius, and convex above the meatus, and concave towards the hollow of the tympanum. According to the observations of anatomists, it consists of six laminæ; the first and most external, is a production of the epidermis, the second is a production of the skin lining the auditory passage; the third is cellular membrane, in which the vessels form an elegant net-work; the fourth is shining, thin, and transparent, arising from the periosteum of the meatus; the fifth is cellular membrane, with a plexus of vessels like the third; and the sixth lamina, which is the innermost, comes from the periosteum of the cavity of the tympanum. This membrane, thus composed of several laminæ, has lately been discovered to possess muscular fibres

MEMBRANOLO'GIA. (From *membrana*, a membrane, and λογος, a discourse.) Membranology. The doctrine of the common integuments and membranes.

MEMBRANE. *Membrana.* A thin expanded substance, composed of cellular texture, whose elastic fibres are so arranged and woven together, as to allow of great pliability. The membranes of the body are various, as the skin, peritoneum, pleura, dura mater, &c. &c.

MEMBRANO'SUS. See *Tensor vaginæ femoris.*

MEMBRA'NUS. See *Tensor vaginæ femoris.*

MEMO'RIÆ OS. See *Occipital bone.*

Menagogues. See *Emmenagogues.*

MENDO'SUS. (From *mendax*, counterfeit.) This term is used, by some, in the same sense as spurius, or illegitimus; *Mendosæ Costæ*, false or spurious ribs; *Mendosa Sutura*, the squamous suture, in the skull, or bastard suture.

MENINGO'PHYLAX. (From μηνιγξ, a membrane, and ψυλασσω, to guard.) An instrument to guard the membranes of the brain, while the bone is cut, or rasped, after the operation of the trepan.

ME'NINX. (From μενω, to remain.) The Greek term for the membranes enveloping the brain. See *Dura mater* and *Pia mater.*

ME'NINX DU'RA. See *Dura mater.*

ME'NINX PI'A. See *Pia mater.*

MENISPE'RMUM. (From μηνη, the moon, and σπερμα, seed, in allusion to the crescent-like form of the seed.) Moon-seed. The name of a genus of plants. Class, *Dioecia.* Order, *Dodecandria.*

MENISPE'RMUM CO'CCULUS. The systematic name of the plant, the berries of which are well known by the name of *Cocculus indicus.* Indian berries, or Indian cockles. *Coccus Indicus. Cocculæ officinarum. Cocci Orientales.* The berry is rugous and kidney-shaped, and contains a white nucleus; it is the produce of the *Menispermum cocculus; foliis cordatis, retusis, mucronatis; caule lacero*, of Linnæus. It is brought from Malabar and the East Indies. It is poisonous if swallowed, bringing on nausea, fainting, and convulsions. The berries possess an inebriating quality; and are supposed to impart that power to most of the London porter. Whilst green, they are used by the Indians to catch fish, which they have the power of intoxicating, and killing. In the same manner they catch birds, making the berry into a paste, forming it into small seeds, and putting these in places where they frequent.

MENORRHA'GIA. (From μηνια, the menses, and ῥηγνυμι, to break out.) *Hæmorrhagia uterina.* Flooding. An immoderate flow of the menses, or uterine hæmorrhage. A genus of disease in the class *pyrexiæ*, and order *hæmorrhagiæ*, of Cullen, characterised by pains in the back, loins, and belly, similar to those of labour, attended with a preternatural flux of blood from the vagina, or a discharge of menses, more copious than natural. He distinguishes six species: —

1. *Menorrhagia rubra;* bloody, from women neither with child nor in child-birth.

2. *Menorrhagia alba*, serous; the fluor albus. See *Leucorrhœa.*

3. *Menorrhagia vitiorum*, from some local disease.

4. *Menorrhagia lochialis*, from women after delivery. See *Lochia.*

5. *Menorrhagia abortus.* See *Abortion.*

6. *Menorrhagia nabothi*, when there is a serous discharge from the vagina in pregnant women.

This disease seldom occurs before the age of puberty, and is often an attendant on pregnancy. It is in general a very dangerous disease, more particularly if it occur at the latter period, as it is then often so rapid and violent as to destroy the female in a very short time, where proper means are not soon adopted. Abortions often give rise to floodings, and at any period of pregnancy, but more usually before the fifth month than at any other time. Moles, in consequence of an imperfect conception, at length become detached, and sometimes give rise to a considerable degree of hæmorrhage.

The causes which most frequently give rise to floodings, are violent exertions of strength, sudden surprises and frights, violent fits of passion, great uneasiness of mind, uncommon longings during pregnancy, over fulness of blood, profuse evacuations, general weakness of the system, external injuries, as blows and bruises, and the death of the child, in consequence of which the placenta becomes partially or wholly detached from the uterus, leaving the mouths of the vessels of the latter, which anastomosed with those of the former, perfectly open. It is necessary to distinguish between an approaching miscarriage and a common flooding, which may be readily done by inquiring whether or not the hæmorrhage has preceeded from any evident cause, and whether it flows gently, or is accompanied with unusual pains. The former usually arises from some fright, surprise, or accident, and does not flow gently and regularly; but bursts out of a sudden, and again stops all at once, and also is attended with severe pains in the back and the bottom of the belly; whereas the latter is marked with no such occurrence. The further a woman is advanced in pregnancy, the greater will be the danger if floodings take place, as the mouths of the vessels are much enlarged during the last stage of pregnancy, and of course a vast quantity will be discharged in a short space of time.

The treatment must differ according to the particular causes of the disease, and according to the different states of constitution, under which it occurs. The hæmorrhage is more frequently of the active kind, and requires the antiphlogistic plan to be strictly enforced, especially obviating the accumulation of heat in every way, giving cold acidulated drink, and using cold local applications; the patient must remain quiet in the horizontal posture; the diet be of the lightest and least stimulant description; and the bowels kept freely open by cooling laxatives, as the neutral salts, &c. It may be sometimes advisable in robust, plethoric, females, particularly in the pregnant state, to take blood at an early period, especially where there is much pain, with a hard pulse: digitalis and antimonials in nauseating doses would also be proper under such circumstances. But where the discharge is rather of a passive character, tonic and astringent medicines ought to be given: rest and the horizontal position are equally necessary, costiveness must be obviated, and cold astringent applications may be materially useful, or the escape of the blood may be prevented mechanically. In alarming cases perhaps the most powerful internal remedy is the superacetate of lead, combined with opium; which latter is often indicated by the irritable state of the patient. A nourishing diet, with gentle exercise in a carriage, and the prudent use of the cold bath, may contribute to restore the patient, when the discharge has subsided.

Me'nsa. The second lobe of the liver was so called by the antients.

Me'nses. (From *mensis*, a month.) See *Menstruation.*

Me'nses cessa'ntes. The menses departing.

Me'nses deficie'ntes. Menses defective or suppressed. The amenorrhœa of Cullen.

Me'nses immo'dicæ. The menorrhagia rubra of Cullen.

Menses, immoderate flow of the. See *Menorrhagia.*

Menses, interruption of. See *Amenorrhœa.*

Menses, retention of. See *Amenorrhœa.*

Me'nsis philoso'phicus. A philosophical, or chemical month. According to some, it is three days and nights; others say it is ten; and there are who reckon it to be thirty or forty days.

MENSTRUATION. From the uterus of every healthy woman who is not pregnant, or who does not give suck, there is a discharge of a red fluid, at certain periods, from the time of puberty to the approach of old age; and, from the periods or returns of this discharge being monthly, it is called *Menstruation.* There are several exceptions to this definition. It is said that some women never menstruate; some menstruate while they continue to give suck; and others are said to menstruate during pregnancy; some are said to menstruate in early infancy, and others in old age; but such discharges, Dr. Denman is of opinion, may, with more propriety, be called morbid, or symptomatic; and certainly the definition is generally true.

At whatever time of life this discharge comes on, a woman is said to be at puberty: though of this state it is a consequence, and not a cause. The early or late appearance of the menses may depend upon the climate, the constitution, the delicacy or hardness of living, and upon the manners of those with whom young women converse. In Greece, and other hot countries, girls begin to menstruate at eight, nine, and ten years of age, but, advancing to the northern climes, there is a gradual protraction of the time till we come to Lapland, where women do not menstruate till they arrive at maturer age, and then in small quantities, at long intervals, and sometimes only in the summer. But, if they do not menstruate according to the genius of the country, it is said they suffer equal inconveniencies as in warmer climates, where the quantity discharged is much greater, and the periods shorter. In this country, girls begin to menstruate from the fourteenth to the eighteenth year of their age, and sometimes at a later period, without any signs of disease; but if they are luxuriously educated, sleeping upon down beds, and sitting in hot rooms, menstruation usually commences at a more early period.

Many changes in the constitution and appearance of women are produced at the time of their first beginning to menstruate. Their complexion is improved, their countenance is more expressive and animated, their attitudes graceful, and their conversation more intelligent and agreeable; the tone of their voice becomes more harmonious, their whole frame, but particularly their breasts, are expanded and enlarged, and their minds are no longer engaged in childish pursuits and amusements.

Some girls begin to menstruate without any preceding indisposition; but there are generally appearances or symptoms which remarkably unpleasant. It is seldom employed but by the country people, who substitute it for penny-royal.

Me′ntha cri′spa. *Colymbifera minor.* The achillea ageratum. This species of mentha has a strong and fragrant smell, its taste is warm, aromatic, and slightly bitter. In flatulences of the primæ viæ, hypochondriacal, and hysterical affections, it is given with advantage.

Me′ntha piperi′ta. The systematic and pharmacopœial name of peppermint. *Mentha piperitis. Mentha piperita, floribus capitatis, foliis ovatis petiolatis, staminibus corolla brevioribus*, of Linnæus. The spontaneous growth of this plant is said to be peculiar to Britain. It has a more penetrating smell than any of the other mints; a strong pungent taste, glowing like pepper, sinking, as it were, into the tongue, and followed by a sense of coolness. The stomachic, antispasmodic and carminative properties of peppermint, render it useful in flatulent colics, hysterical affections, retchings, and other dyspeptic symptoms, acting as a cordial, and often producing an immediate relief. Its officinal preparations are an essential oil, a simple water, and a spirit.

Me′ntha piperi′tis. See *Mentha piperita.*

Me′ntha pule′gium. The systematic name of the penny-royal. *Pulegium. Pulegium regale. Pulegium latifolium glechon.* Pudding-grass. Common penny-royal. *Mentha pulegium, floribus verticillatis, foliis ovatis obtusis subcrenatis, caulibus subteretibus repentibus*, of Linnæus. This plant is considered as a carminative, stomachic, and emmenagogue; and is in very common use in hysterical disorders. The officinal preparations of penny-royal are, a simple water, a spirit, and an essential oil.

Me′ntha sarace′nica. See *Tanacetum Balsamita.*

Me′ntha sati′va. See *Mentha viridis.*

Me′ntha spica′ta. Hart-mint, and common spear-mint. Mentha vulgaris. See *Mentha viridis.*

Me′ntha vi′ridis. Spear-mint. Called also *Mentha vulgaris. Mentha spicata. Mentha viridis, spicis oblongis, foliis lanceolatis nudis serratis sessilibus, staminibus corolla longioribus*, of Linnæus. This plant grows wild in many parts of England. It is not so warm to the taste as peppermint, but has a more agreeable flavour, and is therefore preferred for culinary purposes. Its medicinal qualities are similar to those of peppermint; but the different preparations of the former, though more pleasant, are, perhaps, less efficacious. The officinal preparations of spear-mint are an essential oil, a conserve, a simple water, and a spirit.

Mentha′strum. (Dim. of *mentha.*) See *Mentha aquatica.*

Me′nti leva′tor. See *Levator labii inferioris.*

Me′ntula. (From *matah*, a staff, Heb.) The penis.

Mentula′gra. (From *mentula*, the penis, and *αγρα*, a prey.) A disorder of the penis, induced by a contraction of the erectores musculi, and causing impotence.

MENYA′NTHES. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Menya′nthes trifolia′ta. The systematic name of the buck-bean. *Trifolium paludosum. Trifolium aquaticum. Trifolium fibrinum. Menyanthes.* Water-trefoil, or buck-bean. *Menyanthes trifoliata, foliis ternatis*, of Linnæus. The whole plant is so extremely bitter, that in some countries it is used as a substitute for hops, in the preparation of malt liquour. It is sometimes employed in country places as an active eccoprotic bitter in hydropic and rheumatic affections. Cases are related of its good effects in some cutaneous diseases of the herpetic and seemingly cancerous kind.

Mephitic air. See *Nitrogen.*

MEPHI′TIS. (From *mephuhith*, a blast. Syr.) A poisonous exhalation. See *Contagion.*

MERCURIALI, Girolamo, was born at Torli, in Romagna, in 1530. After taking the requisite degree, he settled as a physician in his native town; and was delegated, at the age of 32, on some public business to pope Pius IV. at Rome. He evinced so much talent on this occasion, that he was particularly invited to remain there; which he accepted, chiefly as it enabled him to pursue his favourite studies to more advantage. He produced, in 1569, a learned and elegant work, "De Arte Gymnastica," which was many times reprinted; and the reputation of this procured him the appointment to the first medical chair at Padua. In 1573, he was called to Vienna to attend the emperor Maximilian II., and was so successful, that he returned loaded with valuable presents, and honoured with the dignities of a knight and count palatine. In 1587, he removed to Bologna, which is ascribed to a degree of self-accusation, in consequence of an error of judgment, into which he had been led, in pronouncing a disease, about which he was consulted at Venice, not contagious, whence much mischief had arisen. His reputation, however, does not appear to have materially suffered from this; and he was invited, in 1599, by the grand duke of Tuscany to Pisa; but shortly after, a severe calculous affection prevented the execution of his duties, and he retired to his native place, where his death happened in 1606. He was a voluminous writer, and, among many other publications, edited a classified collection of the works of Hippocrates, with a learned commentary; but he was too much bigoted to ancient authority and hypothesis. He wrote on the diseases of the skin, those peculiar to women and children, on poisons, and several other subjects.

MERCURIA′LIS. (From *Mercurius*, its discoverer.)

1. The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Enneandria*.

2. The pharmacopœial name of the French mercury. *Mercurialis annua*, of Linnæus. The leaves of this plant have no remarkable smell, and very little taste. It is ranked among the emollient oleraceous herbs, and is said to be gently aperient. Their principal use has been in clysters.

Mercuria′lis a′nnua. The systematic name of the French mercury. See *Mercurialis*.

Mercuria′lis monta′na. The *Mercurialis perennis*, of Linnæus.

Mercuria′lis pere′nnis. The systematic name of dog's mercury. *Cynocrambe. Mercurialis montana* et *sylvestris*. A poisonous plant, very common in our hedges. It produces vomiting and purging, and the person then goes to sleep, from which he does not often awake.

Mercuria′lis sylve′stris. The *Mercurialis perennis*, of Linnæus.

Mercu′rius aceta′tus. See *Hydrargyrus acetatus*.

Mercu′rius alkaliza′tus. See *Hydrargyrum cum creta*.

Mercu′rius calcina′tus. See *Hydrargyri oxydum rubrum*.

Mercu′rius chemico′rum. Quicksilver.

Mercu′rius cinnabari′nus. Cinnabaris factitia, now called sulphuretum hydrargyri rubrum.

Mercu′rius corrosi′vus. See *Hydrargyri oxymurias*.

Mercu′rius corrosi′vus ru′ber. See *Hydrargyri nitrico-oxydum*.

Mercu′rius corrosi′vus sublima′tus. See *Hydrargyri oxymurias*.

Mercu′rius du′lcis sublima′tus. Dulcified mercurial sublimate, now called submurias hydrargyri; formerly called calomelas.

Mercu′rius eme′ticus fla′vus. See *Hydrargyrus vitriolatus*.

Mercu′rius mo′rtis. See *Mercurius vitæ*.

Mercu′rius præcipita′tus a′lbus. See *Hydrargyrum præcipitatum album*.

Mercu′rius præcipita′tus du′lcis. See *Hydrargyri submurias*.

Mercu′rius præcipita′tus ru′ber. See *Hydrargyri nitrico-oxydum*.

Mercu′rius vi′tæ. The mercury of life. *Pelvis angelicus. Mercurius mortis. Algarothi pulvis.* A submuriate of antimony, formerly preferred to the vitrum antimonii, for making of emetic tartar.

MERCURY. *Hydrargyrum. Hydrargyrus. Mercurius.* A metal found in five different states in nature. 1. Native, (*native mercury*,) adhering in small globules to the surface of cinnabar ores, or scattered through the crevices, or over the surfaces of different kinds of stones. 2. It is found united to silver, in the ore called *amalgam of silver*, or *native amalgam of silver*. This ore exhibits thin plates, or grains; it sometimes crystallizes in cubes, parallelopipeda, or pyramids. Its colour is of a silver white, or grey; its lustre is considerably metallic. 3. Combined with sulphur, it constitutes *native cinnabar*, or sulphuret of mercury. This ore is the most common. It is frequently found in veins, and sometimes crystallized in tetrahedra, or three-sided pyramids. Its colour is red. Its streak metallic. 4. Mercury oxydized, and united either to muriatic, or sulphuric acid, forms the ore called *horn quicksilver*, or corneous mercury. These ores are, in general, semi-transparent, of a grey or white colour, sometimes crystallized, but more frequently in grains. 5. United to oxygen, it constitutes the ore called *native oxyde of mercury*. Mercurial ores particularly abound in Spain, Hungary, China, and South America.

Properties.—Mercury, or quicksilver, is the only one of the metals that remains fluid at the ordinary temperature of the atmosphere, but when its temperature is reduced to —40° Fahr. it assumes a solid form. This is a degree of cold, however, that only occurs in high northern latitudes, and, in our climate, mercury cannot be exhibited in a solid state, but by means of artificial cold. When rendered solid, it possesses both ductility and malleability. It crystallizes in octahedra, and contracts strongly during congelation. It is divisible into very small globules. It presents a convex appearance in vessels to which it has little attraction, but is concave in those to which it more strongly adheres. It become electric and phosphorescent by rubbing upon glass, and by agitation in a vacuum. It is a very good conductor of caloric, of electricity, and of Galvanism. The specific gravity of mercury is 13.565. Although fluid, its opacity is equal to that of any other metal, and its surface, when clean, has considerable lustre. Its colour is white, similar to silver. Exposed to the temperature of somewhat above 600° Fahr. it is volatilized. When agitated in the air, especially in contact with viscous fluids, it becomes converted into a black oxyde. At a temperature nearly the same as that at which it boils, it absorbs about 14 or 16 per cent. of oxygen, and then becomes changed into a red crystallizable oxyde, which is spontaneously reducible by light and caloric at a higher temperature. The greater number of the acids act upon mercury, or are at least capable of combining with its oxydes. It combines with sulphur by trituration, but more intimately by heat. It is acted on by the alkaline sulphurets. It combines with many of the metals; these compounds are brittle, or soft, when the mercury is in large proportion. There is a slight union between mercury and phosphorus. It does not unite with carbon, or the earths.

Method of obtaining Mercury.—Mercury may be obtained pure by decomposing cinnabar, by means of iron filings. For that purpose, take two parts of red sulphuret of mercury (cinnabar), reduce it to powder, and mix it with one of iron filings, put the mixture into a stone retort, direct the neck of it into a bottle, or receiver, filled with water, and apply heat. The mercury will then be obtained in a state of purity.

In this process, the sulphuret of mercury, which consists of sulphur and mercury, is heated in contact with iron, the sulphur quits the mercury and unites to the iron, and the mercury becomes disengaged; the residue in the retort is a sulphuret of iron.

Mercury is a very useful article both in the cure of diseases and the arts. There is scarcely a disease against which some of its preparations are not exhibited; and over the venereal disease it possesses a specific power. It is considered to have first gained repute in curing this disease, from the good effects it produced in eruptive diseases. In the times immediately following the venereal disease, practitioners only attempted to employ this remedy with timorous caution, so that, of several of their formulæ, mercury scarcely composed a fourth part, and few cures were effected. On the other hand, empirics who noticed the little efficacy of these small doses, ran into the opposite extreme, and exhibited mercury in such large quantities, and with such little care, that most of their patients became suddenly attacked with the most violent salivations, attended with dangerous consequences. From these two very opposite modes of practice, there originated such uncertainty respecting what could be expected from mercury, and such fears of the consequences which might result from its employment, that every plan was eagerly adopted which offered the least chance of cure without having recourse to this mineral. A medicine, however, so powerful, and whose salutary effects were seen, by attentive practitioners, amid all its inconveniencies, could not sink into oblivion. After efforts had been made to discover a substitute for it, and it was seen how little confidence those means deserved on which the highest praises had been lavished, the attempts to discover its utility were renewed. A medium was pursued, between the too timid methods of those physicians who had first administered it, and the inconsiderate boldness of the empirics. Thus the causes from which both parties failed were avoided; the character of the medicine was revived in a more durable way, and from this period its reputation has always been maintained.

It was about this epoch that mercury began to be internally given; hitherto it had only been externally employed, which was done in three manners. The first, was in the form of liniment, or ointment; the second, as a plaster; and the third, as a fumigation. Of the three methods just described, only the first is at present much in use, and even this is very much altered. Mercurial plasters are now only used as topical discutient applications to tumours and indurations. Fumigations, as antiently managed, were liable to many objections, particularly from its not being possible to regulate the quantity of mercury to be used, and from the effect of the vapour on the organs of respiration frequently occasioning trembling, palsies, &c. Frictions with ointment have always been regarded as the most efficacious mode of administering mercury.

Mercury is carried into the constitution in the same way as other substances, either by being absorbed from the surface of the body, or that of the alimentary canal. It cannot, however, in all cases, be taken into the constitution in both ways, for sometimes the absorbents of the skin will not readily receive it; at least no effect is produced, either on the disease or constitution, from this mode of application. On the other hand, the internal absorbents will, sometimes, not take up the medicine, or, at least, no effect is produced either on the disease or constitution. In many persons, the bowels can hardly bear mercury at all; and it should then be given in the mildest form possible, conjoined with such medicines as will lessen or correct its violent effects, although not its specific ones, on the constitution. When mercury can be thrown into the constitution with propriety, by the external method, it is preferable to the internal plan; because the skin is not nearly so essential to life as the stomach, and is therefore in itself capable of bearing much more than the stomach. The constitution is also less injured. Many courses of mercury would kill the patient if the medicine were only given internally, because it proves hurtful to the stomach and intestines, when given in any form, or joined with the greatest correctors.

Mercury has two effects: one as a stimulus on the constitution and particular parts, the other as a specific on a diseased action of the whole body, or of parts. The latter action can only be computed by the disease disappearing.

In giving mercury in the venereal disease, the first attention should be to the quantity, and its visible effects in a given time; which, when brought to a proper pitch, are only to be kept up, and the decline of the disease to be watched; for by this we judge of the invisible or specific effects of the medicine, and know what variation in the quantity may be necessary. The visible effects of mercury affect either the whole constitution or some parts capable of secretion. In the first, it produces universal irritability, making it more susceptible of all impressions. It quickens the pulse, increases its hardness, and occasions a kind of temporary fever. In some constitutions, it operates like a poison. In some it produces a kind of hectic fever; but such effects commonly diminish on the patient becoming accustomed to the medicine.

Mercury often produces pains like those of rheumatism, and nodes of a scrophulous nature. The quantity of mercury to be thrown in for the cure of any venereal complaint, must be proportioned to the violence of the disease. A small quantity used quickly, will have equal effects to those of a large one employed slowly; but if these effects are merely local, that is, upon the glands of the mouth, the constitution at large not being equally stimulated, the effects upon tho diseased parts must be less, which may be known by the local disease not giving way in proportion to the effects of mercury on some particular part. If it be given in very small quantities, and increased gradually, so as to steal insensibly on the constitution, a vast quantity at a time may at length be thrown in, without any visible effects at all.

The constitution, or parts, are more susceptible of mercury at first than afterwards.

Mercury occasionally attacks the bowels, and causes violent purging, even of blood. This effect is remedied by intermitting the use of the medicine, and exhibiting opium. At other times, it is suddenly determined to the mouth, and produces inflammation, ulceration, and an excessive flow of saliva. To obtain relief in this circumstance, purgatives, nitre, sulphur, gum-arabic, lime-water, camphor, bark, sulphuret of potash, blisters, &c. have been advised. Mr. Pearson, however, does not place much confidence in the efficacy of such means; and, the mercury being discontinued for a time, he recommends the patient to be freely exposed to cold air, with the occasional use of cathartics, mineral acids, Peruvian bark, and the assiduous application of astringent gargles. The most material objection (says Mr. Pearson) which I foresee against the method of treatment I have recommended, is the hazard to which the patient will be exposed of having the saliva suddenly checked, and of suffering some other disease in consequence of it.

The hasty suppression of a ptyalism may be followed by serious inconveniencies, as violent pains, vomiting, and general convulsions.

Cold liquids taken into the stomach, or exposure of the body to the cold air, must be guarded against during a course of mercury. Should a suppression of the ptyalism take place, from any act of indiscretion, a quick introduction of mercury should be had recourse to, with the occasional use of the warm bath.

Mercury, when it falls on the mouth, sometimes produces inflammation, which now and then terminates in mortification. The ordinary operation of mercury does not permanently injure the constitution; but, occasionly, the impairment is very material; mercury may even produce local diseases, and retard the cure of chancres, buboes, and certain effects of the lues venerea, after the poison has been destroyed. Occasionally, mercury acts on the system as a poison, quite unconnected with its agency as a remedy, and neither proportionate to the inflammation of the mouth nor actual quantity of the mineral absorbed. Mr. Pearson has termed this morbid state of the system erethismus; it is characterized by great depression of strength, a sense of anxiety about the præcordia, irregular action of the heart, frequent sighing, trembling, a small, quick, and sometimes intermitting pulse, occasional vomiting, a pale contracted countenance, a sense of coldness; but the tongue is seldom furred, and neither the natural or vital functions are much disturbed. When this effect of mercury takes place, the use of mercury should be discontinued, whatever may be the stage, extent, or violence of the venereal disease. The patient should be exposed to a dry and cool air, in such a way as not to give fatigue; in this way, the patient will often recover in ten or fourteen days. In the early stage, the erethismus may often be averted by leaving off the mercury and giving camphor mixture with volatile alkali. Occasionally, the use of mercury brings on a peculiar eruption, which has received the names of mercurial rash, eczema mercuriale, lepra mercurialis, mercurial disease, and erythema mercuriale.

In order that mercury should act on the human body, it is necessary that it should be oxydised, or combined with an acid. The mercury contained in the unguentum hydrargyri, is an oxyde. This, however, is the most simple and least combined form of all its preparations, and hence, (says Mr. S. Cooper,) it not only operates with more mildness on the system, but with more specific effect on the disease. Various salts of mercury operate more quickly when given internally than mercurial frictions; but few practitioners of the present day confide in the internal use of mercury alone; particularly when the venereal virus has produced effects in consequence of absorption. Rubbing in mercurial ointment is the mode of affecting the system with mercury in the present day; and, as a substitute for this indicate the change which is about to take place. These are usually more severe at the first than in the succeeding periods; and they are similar to those produced by uterine irritation from other causes, as pains in the back and inferior extremities, complaints of the viscera, with various hysteric and nervous affections. These commence with the first disposition to menstruate, and continue till the discharge comes on, when they abate, or disappear, returning, however, with considerable violence in some women, at every period during life. The quantity of fluid discharged at each evacuation, depends upon the climate, constitution, and manner of living; but it varies in different women in the same climate, or in the same woman at different periods; in this country it amounts to about five or six ounces.

There is also a great difference in the time required for the completion of each period of menstruation. In some women the discharge returns precisely to a day, or an hour, and in others there is a variation of several days, without inconvenience. In some it is finished in a few hours, and in others it continues from one to ten days; but the intermediate time, from three to six days, is most usual.

There has been an opinion, probably derived from the Jewish legislator, afterwards adopted by the Arabian physicians, and credited in other countries, that the menstruous blood possessed some peculiar malignant properties. The severe regulations which have been made in some countries for the conduct of women, at the time of menstruation; — the expression used, Isaiah, chap. xxx. and in Ezekiel: — the disposal of the blood discharged, or of any thing contaminated with it: — the complaints of women attributed to its retention: — and the effects enumerated by grave writers, indicate the most dreadful apprehensions of its baneful influence. Under peculiar circumstances of health, or states of the uterus, or in hot climates, if the evacuation be slowly made, the menstruous blood may become more acrimonious or offensive than the common mass, or any other secretion from it; but in this country and age no malignity is suspected, the menstruous woman mixes in society as at all other times, and there is no reason for thinking otherwise than that this discharge is of the most inoffensive nature.

At the approach of old age, women cease to menstruate; but the time of cessation is commonly regulated by the original early or late appearance of the menses. With those who began to menstruate at ten or twelve years of age, the discharge will often cease before they arrive at forty; but if the first appearance was protracted to sixteen or eighteen years of age, independently of disease, such women may continue to menstruate till they have passed the fiftieth, or even approach the sixtieth year of their age. But the most frequent time of the cessation of the menses, in this country, is between the forty-fourth and forty-eighth year; after which women never bear children. By this constitutional regulation of the menses, the propagation of the species is in every country confined to the most vigorous part of life; and had it been otherwise, children might have become parents, and old women might have had children, when they were unable to supply them with proper or sufficient nourishment. See *Catamenia.*

MENSTRUUM. Solvent. All liquors are so called which are used as dissolvents, or to extract the virtues of ingredients by infusion, decoction, &c. The principal *menstrua*, made use of in *Pharmacy*, are water, vinous spirits, oils, acid, and alkaline liquors. Water is the *menstruum* of all salts, of vegetable gums, and of animal jellies. Of the first it dissolves only a determinate quantity, though of one kind of salt more than of another; and being thus saturated, leaves any additional quantity of the same salt untouched. It is never saturated with the two latter, but unites readily with any proportion of them, forming, with different quantities, liquors of different consistencies. It takes up likewise, when assisted by trituration, the vegetable gummy resins, as ammoniacum and myrrh; the solutions of which, though imperfect, that is, not transparent, but turbid and of a milky hue, are nevertheless applicable to valuable purposes in medicine. Rectified spirit of wine is the *menstruum* of the essential oils and resins of vegetables; of the pure distilled oils of animals, and of soaps, though it does not act upon the expressed oil and fixed alkaline salt, of which soap is composed. Hence, if soap contains any superfluous quantity of either the oil or salt, it may, by means of this *menstruum*, be excellently purified therefrom. It dissolves, by the assistance of heat, volatile alkaline salts, and more readily the neutral ones, composed either of fixed alkali and the acetic acid, as the sal diureticus, or of volatile alkali and the nitric acid. Oils dissolve vegetable resins and balsams, wax, animal fats, mineral bitumens, sulphur, and certain metallic substances, particularly lead. The expressed oils are, for most of these bodies, more powerful *menstrua* than those obtained by distillation; as the former are more capable of sustaining, without injury, a strong heat, which is, in most cases, necessary to enable them to act. All acids dissolve alkaline salts, alkaline earths, and metallic substances. The different acids differ greatly in their action upon these last: one dissolving some particular metals, and another others. The vegetable acids dissolve a considerable quantity of zinc, iron, copper, and tin; and extract so much from the metallic part of antimony as to become powerfully emetic: they likewise dissolve lead, if previously calcined by fire; but more copiously if corroded by their steam. The muriatic acid dissolves zinc, iron, and copper; and though it scarcely acts on any other metallic substance in the common way of making solutions, it may nevertheless be artfully combined with them all. The corrosive sublimate and antimonial caustic of the shops, are combinations of it with the oxydes of mercury and antimony, effected by applying the acid in the form of fume, to the subjects at the same time strongly heated. The nitric acid is the common *menstruum* of all metallic substances, except gold and antimony, which are soluble only in a mixture of the nitric and muriatic. The sulphuric acid easily dissolves zinc, iron, and copper; and may be made to corrode, or imperfectly dissolve most of the other metals. Alkaline lixivia dissolve oils, resinous substances, and sulphur. Their power is greatly promoted by the addition of quick lime, instances of which occur in the preparation of soap and in the common caustic. Thus assisted, they reduce the flesh, bones, and other solid parts of animals, into a gelatinous matter. Solutions made in water and spirit of wine, possess the virtue of the body dissolved; whilst oils generally sheathe its activity, and acids and alkalies vary its quality. Hence watery and spirituous liquors are the proper *menstrua* of the native virtues of vegetable and animal matters. Most of the foregoing solutions are easily effected, by pouring the *menstruum* on the body to be dissolved, and suffering them to stand together for some time, exposed to a suitable warmth. A strong heat is generally requisite to enable oils and alkaline liquors to perform their office; nor will acids act on some metallic bodies without its assistance. The action of watery and spirituous *menstrua* is likewise expedited by a moderate heat, though the quantity which they afterwards keep dissolved, is not, as some suppose, by this means increased. All that heat occasions these to take up, more than they would do in a longer time in the cold, will, when the heat ceases, subside again. The action of acids on the bodies which they dissolve, is generally accompanied with heat, effervescence, and a copious discharge of fumes. The fumes which arise during the dissolution of some metals, in the sulphuric acid, prove inflammable; hence, in the preparation of the artificial vitriols of iron and zinc, the operator ought to be careful, especially where the solution is made in a narrow-mouthed vessel, lest, by the imprudent approach of a candle, the exhaling vapour be set on fire. There is another species of solution in which the moisture of air is the *menstruum*. Fixed alkaline salts, and those of the neutral kind, composed of alkaline salts and certain vegetable acids, or of alkaline earths, and any acid except the sulphuric, and some metallic salts on being exposed for some time to a moist air, gradually attract its humidity, and at length become liquid. Some substances, not dissoluble in water in its grosser form, as the butter of antimony, are easily liquified by this slow action of the aërial moisture. This process is termed *Deliquation*. The cause of solution assigned by some naturalists, namely, the admission of the fine particles of one body into the pores of another, whose figure fits them for their reception, is not just, or adequate, but hypothetical and ill-presumed; since it is found that some bodies will dissolve their own quantity of others, as water does of Epsom salt, alkohol of essential oils, mercury of metals, one metal of another, &c. whereas the sum of the pores or vacuities of every body must be necessarily less than the body itself, and consequently those pores cannot receive a quantity of matter equal to the body wherein they reside.

How a *menstruum* can suspend bodies much heavier than itself, which very often happens, may be conceived by considering, that the parts of no fluids can be so easily separated, but they will a little resist or retard the descent of any heavy bodies through them; and that this resistance is, *cæteris paribus*, still proportional to the surface of the descending bodies. But the surface of bodies do by no means increase or decrease in the same proportion as their solidities do: for the solidity increases as the cube, but the surface only as the square of the diameter; wherefore it is plain, very small bodies will have much larger surfaces, in proportion to their solid contents, than larger bodies will, and consequently, when grown exceeding small, may easily be buoyed up in the liquor.

MENTA'GRA. (From *mentum*, the chin, and αγρα, a prey.) *Impetigo.* An eruption about the chin, forming a tenacious crust, like that on scald heads.

ME'NTHA. (From *Minthe*, the harlot who was changed into this herb.) *Hedyosmus.* The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.* Mint.

ME'NTHA AQUA'TICA. *Menthastrum. Sisymbrium menthastrum. Mentha rotundifolia palustris.* Water-mint. This plant is frequent in moist meadows, marshes, and on the banks of rivers. It is less agreeable than the spear-mint, and in taste bitterer and more pungent. It may be used with the same intentions as the spear-mint, to which, however, it is much inferior.

ME'NTHA CATA'RIA. *Mentha felina. Herba felis. Calamintha. Nepetella.* Nep, or cat-mint. See *Nepeta cataria.*

ME'NTHA CERVI'NA. The systematic name of the hart's penny-royal. *Pulegium cervinum.* This plant possess the virtues of penny-royal in a very great degree; but is

Metapto'sis. (From μεταπιπτω, to digress.) A change from one disease to another.

META'STASIS. (From μεθιστημι, to change, to translate.) The translation of a disease from one place to another.

Metasy'ncrisis. (From μετασυγκρινω, to transmute.) Any change of constitution.

METATARSAL BONES. The five longitudinal bones between the tarsus and the toes; they are distinguished into the metatarsal bone of the great toe, fore toe, &c.

METATA'RSUS. (From μετα, after, and ταρσος, the tarsus.) That part of the foot between the tarsus and toes.

Mete'lla nux. See *Strychnos nux vomica.*

Meteori'smus. (From μετεωρος, a vapour.) 1. A flatulent dropsy.

2. A tympanitic state of the abdomen, taking place suddenly in acute diseases.

Meteo'ros. (Μετεωρος: from μετα, and αειρω, to elevate.) Elevated, suspended, erect, sublime, tumid. Galen expounds pains of this sort, as being those which affect the peritonæum, or other more superficial parts of the body: these are opposed to the more deep-seated ones.

Methe'glin. A drink prepared from honey by fermentation.

Methemeri'nus. (From μετα, and ημερα, a day.) A quotidian fever.

Metho'dica medici'na. Signifies that practice which was conducted by rules, such as are taught by Galen and his followers, in opposition to the empirical practice.

Me'thodus. (From μετα, and οδος, a way.) The method, or ratio, by which any operation or cure is conducted.

Meto'pion. Μετωπιον. American sumach, a species of *Rhus.* It is a name of the bitter almond, also of an oil, or an ointment, made by Dioscorides, which was thus called because it had galbanum in it, which was collected from a plant called *Metopium.*

Meto'pium. Μετοπιον. An ointment made of galbanum.

Meto'pum. (From μετα, after, and ωψ, the eye.) The forehead.

Meto'sis. A kind of amaurosis, from an excess of short-sightedness.

ME'TRA. (From μητηρ, a mother.) The womb.

Metre'nchyta. (From μητρα, the womb, and εγχυω, to pour into.) Injections into the womb.

Metre'nchytes. (From μητρα, the womb, and εγχυω, to pour in.) A syringe to inject fluids into the womb.

METRI'TIS. (From μητρα, the womb.) Inflammation of the uterus. See *Hysteritis.*

Metroce'lis. (From μητηρ, a mother, and κηλις, a blemish.) A mole, or mark, impressed upon the child by the mother's imagination.

Metro-ma'nia. A rage for reciting verses. In the Acta Societatis Medicæ Havniensis, published 1779, is an account of a tertian attended with remarkable symptoms; one of which was the *metro-mania,* by which the patient spoke verses extempore, having never before had the least taste for poetry; when the fit was off, the patient became stupid, and remained so till the return of the paroxysm, when the poetical powers returned again.

METROPTO'SIS. (From μητρα, the uterus, and πιπτω, to fall down.) *Prolapsus uteri.* The descent of the uterus through the vagina.

Metrorrha'gia. (From μητρα, the womb, and ρηγνυμι, to break out.) An excessive discharge from the womb.

Me'u. See *Æthusa.*

Me'um athama'nticum. (From μειων, less; so called, according to Minshew, from its diminutive size.) Spignel. See *Æthusa.*

Mexica'num. (From *Mexico,* whence it is brought.) A name of the balsam of Peru.

Mexico seed. See *Ricinus.*

Mexico tea. See *Chenopodium ambrosioides.*

Mezereon. See *Daphne mezereum.*

MEZE'REUM. (A word of some barbarous dialect.) Mezereon. See *Daphne mezereum.*

Meze'reum aceta'tum. Very thin slices of the bark of the fresh mezereon root are to be steeped for twenty-four hours in common vinegar. The late Dr. Morris usually directed the application of this remedy to issues, when a discharge from them could not be encouraged by the common means. It generally answers this purpose very effectually in the course of one night, the pea being removed, and a small portion of the bark applied over the opening.

MIA'SMA. (*Miasma, -tis,* n. plural *miasmata,* μιασμα, from μιαινω, to infect.) See *Contagion.*

Microco'smic be'zoar. See *Calculus.*

Microleuconymphæ'a. (From μικρος, small, λευκος, white, and νυμφαια, the water-lily.) The small white water-lily.

Micronymphæ'a. (From μικρος, small, and νυμφαια, the water-lily.) The smaller water-lilly.

Micro'rchis. (From μικρος, small, and ορχις, a testicle.) One whose testicles are unusually small.

Microsphy'xia. (From μικρος, small, and σφυξις, the pulse.) A debility and smallness of the pulse.

Midriff. See *Diaphragma.*

Mi'gma. (From μιγνυω, to mix.) A confection, or ointment.

Migra'na. A corruption of hemicrania.

Milfoil, common. See *Achillea millefolium.*

MILIA'RIA. (From *milium*, millet; so called because the small vesicles upon the skin resemble millet-seed.) Miliary fever. A genus of disease in the class *pyrexiæ*, and order *exanthemata*, of Cullen, characterised by synochus; cold stage considerable: hot stage attended with anxiety and frequent sighing; perspiration of a strong and peculiar smell; eruption, preceded by a sense of pricking, first on the neck and breast, of small red pimples, which in two days become white vesicles, desquamate, and are succeeded by fresh pimples. Miliary fever has been observed to affect both sexes, and persons of all ages and constitutions: but females, of a delicate habit, are most liable to it, particularly in childbed. Moist variable weather is most favourable to its appearance, and it occurs most usually in the spring and autumn. It is by some said to be a contagious disease, and has been known to prevail epidemically.

Very violent symptoms, such as coma, delirium, and convulsion fits, now and then attend miliary fever, in which case it is apt to prove fatal. A numerous eruption indicates more danger than a scanty one. The eruption being steady is to be considered as more favourable than its frequently disappearing and coming out again, and it is more favourable when the places covered with the eruption appear swelled and stretched than when they remain flaccid. According to the severity of the symptoms, and depression of spirits, is the danger greater. See also *Sudamina*.

Mili'olum. (Dim. of *milium*, millet.) A small tumour on the eyelids, resembling in size a millet-seed.

Milita'ris. (From *miles*, a soldier; so called from its efficacy in curing fresh wounds.) See *Achillea Millefolium*.

Milita'ris he'rba. See *Achillea Millefolium*.

Mi'lium. (From *milium*, a millet-seed.) *Grutum*. A very white and hard tubercle, in size and colour resembling a millet-seed. Its seat is immediately under the cuticle, so that, when pressed, the contents escape appearing of an atheromatous nature.

Mi'lium so'lis. See *Lithospermum*.

MILK. *Lac*. A fluid secreted by peculiar glands, and designed to nourish animals in the early part of their life. It is of an opaque white colour, a mild saccharine taste, and a slightly aromatic smell. It is separated immediately from the blood, in the breasts or udders of female animals. Man, quadrupeds, and cetaceous animals, are the only creatures which afford milk. All other animals are destitute of the organs which secrete this fluid. Milk differs greatly in the several animals.

The following are the general *Properties* of animal and human milk: —

Milk separates spontaneously into *cream*, *cheese*, and *serum of milk*; and that sooner in a warm situation than in a cold one. In a greater temperature than that of the air, it acesces and coagulates, but more easily and quicker by the addition of acid salts, or coagulating plants. *Lime water* coagulates milk imperfectly. It is not coagulated by pure *alkali*; which indeed dissolves its caseous part. With carbonated *alkali* the caseous and cremoraceous parts of milk are changed into a liquid soap, which separates in the form of white flakes; such milk, by boiling, is changed into a yellow and then into a brown colour. Milk, distilled to dryness, gives out an insipid water, and leaves a whitish brown extract, called the *extract of milk*; which, dissolved in water, makes a milk of less value. Milk fresh drawn, and often agitated in a warm place, by degrees goes into the vinous fermentation, so that alkohol may be drawn over by distillation, which is called *spirit of milk*. It succeeds quicker if yeast be added to the milk. Mares' milk, as it contains the greatest quantity of the sugar of milk, is best calculated for vinous fermentation.

The *Principles* of milk, or its integral parts, are, 1. The *Aroma*, or odorous volatile principle, which flies off from fresh-drawn milk in the form of visible vapour. 2. *Water*, which constitutes the greatest part of milk. From one pound, eleven ounces of water may be extracted by distillation. This water, with the sugar of milk, forms the *serum of the milk*. 3. *Bland oil*, which, from its lightness, swims on the surface of milk after standing, and forms the *cream of milk*. 4. *Cheese*, separated by coagulating milk, falls to the bottom of the vessel, and is the animal gluten. 5. *Sugar*, obtained from the serum of milk by evaporation. It unites the caseous and butyraceous part with the water of the milk. 6. Some *neutral salts*, as the muriate of potash and muriate of lime, which are accidental, not being found at all times, nor in every milk. These principles of milk differ widely in respect to quantity and quality, according to the diversity of the animals.

The *aroma* of the milk is of so different an odour, that persons accustomed to the smell, and those whose olfactory nerves are very sensible, can easily distinguish whether milk be that of the cow, goat, mare, ass, or human. The same may be said of the serum of the milk, which is properly the seat of the aroma. The *serum* of milk is thicker and more copious in the milk of the sheep and goat, than in that of the ass, mare, or human milk. The *butter* of goats' and cows' milk is easily separated, and will not again unite itself with the butter-milk. Sheep's butter is soft, and not of the consistence of that obtained from the cow and goat. Asses', mares', and human butter, can only be separated in the form of cream; which cream, by the mode of applying mercury, Mr. Abernethy recommends the mercurial fumigation, where the patient has not strength to rub in ointment, and whose bowels will not bear the internal exhibition of it.

The preparations of mercury now in use are,

1. Nitrico-oxydum hydrargyri.
2. Oxydum hydrargyri cinereum.
3. Oxydum hydrargyri rubrum.
4. Oxy-murias hydrargyri.
5. Submurias hydrargyri.
6. Sulphuretum hydrargyri rubrum et nigrum.
7. Hydrargyrum cum creta.
8. Hydrargyrum precipitatum album.
9. Hydrargyrum purificatum.

Mercury, dog's. See *Mercurialis perennis.*

Mercury, English. See *Chenopodium bonus henricus.*

Mercury, French. See *Mercurialis.*

MEROBA′LNEUM. (From μερος, a part, and βαλανειον, a bath.) A partial bath.

MEROCE′LE. (From μερος, the thigh, and κηλη, a tumour.) A femoral hernia. See *Hernia.*

ME′RON. (Μηρος.) The thigh.

MERRET, CHRISTOPHER, was born at Winchcombe in 1614. After graduating at Oxford, he settled in London, became a fellow of the College of Physicians, and one of the original members of the Philosophical Society, which, after the Restoration, was called the Royal Society. He appears to have had a considerable practice, and reached his 81st year. His first publication was a Collection of Acts of Parliament, &c. in proof of the exclusive Rights of the College, printed in 1660; which afforded the basis of Dr. Goodall's history: this was followed nine years after by "A Short View of the Frauds of Apothecaries," which involved him in much controversy. He published also a Catalogue of the Natural Productions of this Island, of which the botanical part is best executed; and he communicated several papers to the Royal Society.

ME′RUS. Applied to several things in the same sense as genuine, or unadulterated, as *merum vinum*, neat wine.

MERY, JOHN, was born at Vatau, in France, in 1645. His father being a surgeon, he determined upon the same profession, and went accordingly to the Hotel Dieu at Paris, where he studied with extraordinary ardour, even passing the night in dissection in his bed-room. In 1681 he was appointed to the office of queen's surgeon; and two years after, surgeon-major to the invalids. Soon after this he was chosen to attend the Queen of Portugal, who died, however, before his arrival; and he refused very advantageous offers to detain him at that, as well as the Spanish court. He was now received into the Academy of Sciences, and shortly after sent on a secret journey to England; then chosen to attend upon the Duke of Burgundy, who was a child. But these occupations were irksome to him, and he even shunned private practice, and general society, devoting himself to the duties of the Hospital of Invalids, and to the dissecting-room. In 1700 he was appointed first surgeon to the Hotel Dieu, which gratified his utmost ambition; and he declined repeated solicitations to give lectures there on anatomy. He procured, however, the erection of a theatre for the students, where they might have more regular instruction. It was a great part of the labour of his life to form an anatomical museum, yet he did not estimate these researches too highly, and was very slow in framing, or in receiving, new theories concerning the animal economy. About the age of 75, he suddenly lost the use of his legs, after which his health declined, and he died in 1722. Besides many valuable communications to the Academy of Sciences, he published a description of the ear; Observations on Frère Jacques' Method of Cutting for the Stone, the general principle of which he approved; a tract on the Fœtal Circulation, controverting the received opinion, that part of the blood passes from the right to the left ventricle, through the foramen ovale, and even assigning it an opposite course; and physical problems, concerning the connection of the fœtus with the mother, and its nutrition.

MESARÆ′UM. (From μεσος, the middle, and αραια, the belly.) The mesentery.

MESEMBRYA′NTHEMUM CRYSTA′LLINUM. The juice of this plant, in a dose of four spoonfuls every two hours, it is asserted, has removed an obstinate spasmodic affection of the neck of the bladder, which would not yield to other remedies.

MESENTERIC. Meseraic. Belonging to the mesentery. See *Mesentery.*

MESENTERIC ARTERIES. *Arteriæ mesentericæ.* Two branches of the aorta in the abdomen are so called. The superior mesenteric is the second branch; it is distributed upon the mesentery, and gives off the superior or right colic artery. The inferior mesenteric is the fifth branch of the aorta; it sends off the internal hæmorrhoidal.

MESENTERIC GLANDS. *Glandulæ mesentericæ.* These are conglobate, and are situated here and there in the cellular membrane of the mesentery. The chyle from the intestines passes through these glands to the thoracic duct.

MESENTERIC PLEXUS OF NERVES. *Nervorum plexus mesentericus.* The superior, middle, and lower mesenteric plexuses of nerves are formed by the branches of the great intercostal nerves.

MESENTERIC VEINS. *Venæ mesentericæ.* They all run into one trunk, that evacuates its blood into the vena portæ. See *Vena portæ.*

MESENTERI'TIS. (From μεσεντεριον, the mesentery.) An inflammation of the mesentery. A species of peritonitis of Cullen.

ME'SENTERY. (*Mesenterium*; from μεσος, the middle, and εντερον, an intestine.) A membrane in the cavity of the abdomen attached to the vertebræ of the loins, and to which the intestines adhere. It is formed of a duplicature of the peritoneum, and contains within it adipose membrane, lacteals, lymphatics, lacteal glands, mesenteric arteries, veins, and nerves. Its use is to sustain the intestines in such a manner that they possess both mobility and firmness; to support and conduct with safety the blood-vessels, lacteals, and nerves; to fix the glands, and give an external coat to the intestines.

It consists of three parts: one uniting the small intestines, which receives the proper name of mesentery; another connecting the colon, termed mesocolon; and a third attached to the rectum, termed mesorectum.

Meseraic. The same as mesenteric.

Mese'rion. See *Daphne mezereum.*

Mesi're. A disorder of the liver, mentioned by Avicenna, accompanied with a sense of heaviness, tumour, inflammation, pungent pain, and blackness of the tongue.

MESOCO'LON. (From μεσος, the middle, and κωλον, the colon.) The portion of the mesentery to which the colon is attached. The mesentery and mesocolon are the most important of all the productions of the peritonæum. In the pelvis, the peritonæum spreads itself shortly before the rectum. But where that intestine becomes loose, and forms the semilunar curve, the peritonæum there rises considerably from the middle iliac vessels, and region of the psoas muscle, double, and with a figure adapted for receiving the hollow colon. But above, on the left side, the colon is connected with almost no intermediate loose production to the peritonæum, spread upon the psoas muscle, as high as the spleen, where this part of the peritonæum, which gave a coat to the colon, being extended under the spleen, receives and sustains that viscus in a hollow superior recess.

Afterwards the peritonæum, from the left kidney, from the interval between the kidneys, from the large vessels, and from the right kidney, emerges forwards under the pancreas, and forms a broad and sufficiently long continuous production, called the transverse mesocolon, which, like a partition, divides the upper part of the abdomen, containing the stomach, liver, spleen, and pancreas, from the lower part. The lower plate of this transverse production is continued singly from the right mesocolon to the left, and serves as an external coat to a pretty large portion of the liver, and descending part of the duodenum. But the upper plate, less simple in the course, departs from the lumbar peritonæum at the kidney, and region of the vena cava, farther to the right than the duodenum, to which it gives an external membrane, not quite to the valve of the pylorus; and beyond this intestine, and beyond the colon, it is joined with the lower plate, so that a large part of the duodenum lies within the cavity of the mesocolon. Afterwards, in the region of the liver, the mesocolon is inflected, and descending over the kidney of the same side much shorter, it includes the right of the colon, as far as the intestinum cæcum, which rests upon the iliac muscle and the appendix, which is provided with a peculiar long curved mesentery. There the mesocolon terminates, almost at the bifurcation of the aorta.

The whole of the mesocolon and of the mesentery is hollow, so that the air may be forced in between its two laminæ, in such a manner as to expand them into a bag. At the place where it sustains the colon, and also from part of the intestinum rectum, the mesocolon, continuous with the outer membrane of the intestine, forms itself into small slender bags, resembling the omentum, for the most part in pairs, with their loose extremities thicker and bifid, and capable of admitting air blown in between the plates of the mesocolon.

Mesocra'nium. (From μεσος, the middle, and κρανιον, the skull.) The crown of the head, or vertex.

Mesoga'strium. (From μεσος, the middle, and γαστηρ, the stomach.) The substance on the concave part of the stomach, which attaches itself to the adjacent parts.

Mesoglo'ssus. (From μεσος, the middle, and γλωσσα, the tongue.) A muscle inserted in the middle of the tongue.

Mesome'ra. (From μεσος, the middle, and μηρος, the thigh.) The parts between the thighs.

Mesompha'lium. (From μεσος, the middle, and ομφαλος, the navel.) The middle of the navel.

Meso'phryum. (From μεσος, the middle, and οφρυα, the eyebrows.) The part between the eyebrows.

Mesopleu'rum. (From μεσος, the middle, and πλευρον, a rib.) The space or muscles between the ribs.

MESORE'CTUM. (From μεσος, the middle, and *rectum*, the straight gut.) The portion of peritonæum which connects the rectum to the pelvis.

Meso'thenar. (From μεσος, the middle, and θεναρ, the palm of the hand.) A muscle situated in the middle of the palm of the hand.

ME'SPILUS. (Οτι εν τω μεσω πιλος, because it has a cap or crown in the middle of it.)

1. The name of a genus of plants in the

Linnæan system. Class, *Icosandria*. Order, *Pentagynia*.

2. The pharmacopœial name of the medlar. This fruit, and also its seeds, have been used medicinally. The tree which bears them is the *Mespilus germanica*, of Linnæus. The immature fruit is serviceable in checking diarrhœas; and the seeds were formerly esteemed in allaying the pain attendant on nephritic diseases.

Me′spilus germa′nica. The systematic name of the medlar-tree. See *Mespilus*.

MESUE, one of the early physicians among the Arabians, was born in the province of Khorasan, and flourished in the beginning of the ninth century. His father was an apothecary at Nisaboar. He was educated in the profession of physic by Gabriel, the son of George Backtishua, and through his favour was appointed physician to the hospital of his native city. Although a Christian he was in great favour with several successive Caliphs, being reputed the ablest scholar and physician of his age. When Haroun al Raschid, appointed his son viceroy of Khorasan, Mesue was nominated his body physician, and was placed by him at the head of a college of learned men, which he instituted there. When Almammon succeeded to the throne in 813, he brought Mesue to Bagdad, and made him a professor of medicine there, as well as superintendant of the great hospital, which offices he filled a great number of years. He was also employed in transferring the science of the Greeks to his own country, by translating their works. He is supposed by Freind to have written in the Syriac tongue. He was author of some works, which are cited by Rhazes, and others, but appear to have perished; for those now-extant in his name do not correspond with these citations, nor with the character given of them by Haly Abbas, besides that Rhazes is quoted in them, who lived long after Mesue: they probably belonged to another physician of the same name, who is mentioned by Leo Africanus, and died in the beginning of the eleventh century.

Meta′basis. (From μεταβαινω, to digress.) *Metabole*. A change of remedy, of practice, or disease; or any change from one thing to another, either in the curative indications, or the symptoms of a distemper.

Meta′bole. See *Metabasis*.

METACARPAL BONES. The five longitudinal bones that are situated between the wrist and the fingers; they are distinguished into the metacarpal bone of the thumb, fore-finger, &c.

METACA′RPUS. (From μετα, after, and καρπος, the wrist.) *Metacarpium*. That part of the hand which is between the wrist and the fingers.

Metaca′rpeus. A muscle of the carpus. See *Adductor metacarpi minimi digiti manus*.

Metacera′sma. (From μετα, after, and κεραννυμι, to mix.) Cerasma. A mixture tempered with any additional substance.

Metacheiri′xis. (From μεταχειριζω, to perform by the hand.) Surgery. Any manual operation.

Metachore′sis. (From μεταχωρεω, to digress.) The translation of a disease from one part to another.

Metacine′ma. (From μετα, and κινεω, to remove.) Diseased pupil of the eye, or distortion of it.

Metaco′ndylus. (From μετα, after, and κονδυλος, a knuckle.) The last joint of a finger, or that which contains the nail.

Meta′llage. (From μεταλλαττω, to change.) A change in the state or treatment of a disease.

METALLU′RGIA. (From μεταλλον, a metal, and εργον, work, labour.) That part of chemistry which concerns the operations of metals.

METALS. We are at present acquainted with twenty-seven metals, essentially differing from each other, besides those recently obtained from the fixed alkalies and earths, namely,

Arsenic. Tungsten. Molybdena. Chrome. Columbium. Titanium. Uranium. Cobalt. Nickel. Manganese. Bismuth. Antimony. Tellurium. Mercury. Zinc. Tin. Lead. Iron. Copper. Silver. Gold. Platina. Palladium. Rhodium. Iridium. Osmium, and Cerium.

The antient division of these substances into noble or perfect, and semi, or imperfect metals, is now abandoned, and we class them into different genera; proceeding in a gradation from those which possess, in a certain sense, the *least*, to those which possess the *most* metallic properties.

Classification of Metals.

1. *Very brittle and acidifiable Metals.*—Arsenic. Tungsten. Molybdena. Chrome. Columbium.

2. *Less brittle and simple oxidizable Metals.*—Titanium. Uranium. Cobalt. Nickel. Manganese. Bismuth. Antimony. Tellurium.

3. *Partly ductile and oxidizable Metals.*—Mercury. Zinc.

4. *Very ductile and easily oxidizable Metals.*—Tin. Lead. Iron. Copper.

5. *Exceedingly ductile and difficultly oxidizable Metals.*—Silver. Gold. Platina.

The properties of the rest are not sufficiently ascertained to be arranged here.

All the metals are found in the bowels of the earth, though sometimes they are on the surface. They are met with in different combinations with other matters, such as sulphur, oxygen, and acids; particularly with the carbonic, muriatic, sulphuric, and phosphoric acids. They are also found combined with each other, and sometimes, though rarely, in a pure metallic state, distinguishable by the naked eye.

In their different states of combination, they are said to be mineralized; and are called ORES. The ores of metals are, for the most part, found in nature in mountainous districts; and always in such as form a continued chain. There are mountains which consist entirely of iron ore, but, in general, the metallic part of a mountain bears a very inconsiderable proportion to its bulk. Ores are also met with in the cavities or crevices of rocks, forming what are termed VEINS, which are more easily discovered in these situations than when they lie level in plains.

The metallic matter of ores is very generally incrusted, and intermingled with some earthy substance, different from the rock in which the vein is situated; which is termed its MATRIX. This, however, must not be confounded with the mineralizing substance with which the metal is combined, such as sulphur, &c.

General physical Properties of Metals.

All metals are combustible bodies. They possess a certain brilliancy, in consequence of the complete reflection of the light that falls upon them, which is termed *metallic lustre*. They are the most dense and heavy substances in nature; the heaviest fossil, not metallic, having a specific gravity much below that of the lightest metal. They are the most opaque of all bodies. A stone of the greatest opacity, when divided into thin plates, has more or less transparency; whereas gold is the only metal which admits of being reduced to such a degree of thinness as to admit the smallest perceptible transmission of light. Gold leaf, which is about 1-280,000 part of an inch in thicknes, transmits light of a lively green colour; but silver, copper, and all the rest of the metals, are perfectly opaque. Another property, which belongs exclusively to metals, (though they do not all possess it,) is *malleability;* by which is meant a capacity of having their surface increased either in length or breadth, without being liable to fracture. This capacity is not precisely the same in those metals which do possess it, for some, which admit of extension when struck with a hammer, cannot be drawn into wire, which property is termed *ductility:* this property depends, in some measure, on another peculiar quality of metals, namely, *tenacity;* by which is meant the power which a metallic wire, of small diameter, has of resisting the action of a considerable weight suspended from its extremity. All metals are fusible, though the degree of temperature at which this can be effected differs very much. Mercury is always fluid at the ordinary temperature of our atmosphere, while platina can scarcely be melted by the most intense heat of our furnaces. Metals are perfectly opaque when in a state of fusion; and are crystallizable when suffered to cool slowly and undisturbed. The tetrahedron and the cube are their primitive figures, though they very often take the octahedral form. They can likewise be volatilized at very high temperatures. They are the best conductors of caloric and electricity. Their susceptibility of combination is very great: they unite generally with sulphur and phosphorus; but iron only with carbon. They do not combine with earths by fusion; but their oxydes readily unite to acids, alkalies, and earths. They decompose water and several acids. Some effect this at common temperatures: some require a red heat, and others the interposition of another body. Water does not dissolve any of the metals, though it is a solvent of some of their oxydes. They are insoluble in ardent spirit, ether, or oils. They are all capable of combining with oxygen, though many of them require very high temperatures to effect this union, and others cannot be united to it but in an indirect manner. Most of the metals can be combined with each other: they then form alloys, or if mercury be present, amalgams, many of which are of the greatest utility in the arts.

METAMORPHO′PSIA. (From *μεταμορφωσις*, a change, and *οψις*, sight.) *Visus defiguratus.* Disfigured vision. It is a defect in vision, by which persons perceive objects changed in their figures. The species are, 1. *Metamorphopsia acuta*, when objects appear much larger than their size. 2. *Metamorphopsia diminuta*, when objects appear diminished in size, arising from the same causes as the former. 3. *Metamorphopsia mutans*, when objects seem to be in motion: to the vertiginous and intoxicated persons, every thing seems to stagger. 4. *Metamorphopsia tortuosa seu flexuosa*, when objects appear tortuous, or bending. 5. *Metamorphopsia inversa*, when all objects appear inverted. 6. *Metamorphopsia imaginaria*, is the vision of a thing not present, as may be observed in the delirious, and in maniacs. 7. *Metamorphopsia from a remaining impression:* it happens to those who very attentively examine objects, particularly in a great light, for some time after to perceive the impression.

METAPE′DIUM. (From *μετα*, after, and *πους*, the foot.) The metatarsus.

META′PHRENUM. (From *μετα*, after, and *φρενες*, the diaphragm.) That part of the back which is behind the diaphragm.

METAPOROPOIE′SIS. (From *μετα*, *πορος*, a duct, and *ποιεω*, to make.) A change in the pores of the body.

assistance of heat, is with ease again united to the milk from which it is separated. The *cheese* of cows' and goats' milk is solid and elastic, that from asses and mares soft, and that from sheeps' milk almost as soft as gluten. It is never separated spontaneously from the milk of a woman, but only by art, and is wholly fluid. The *serum* abounds most in human, asses', and mares' milk. The milk of the cow and goat contain less, and that of the sheep least of all. The *sugar* of milk is in the greatest quantity in the mares and asses, and somewhat less in the human milk.

MILK, ASSES'. Asses' milk has a very strong resemblance to human milk in colour, smell, and consistence. When left at rest for a sufficient time, a cream forms upon its surface, but by no means in such abundance as on women's milk. Asses' milk differs from cows' milk, in its cream being less abundant and more insipid; in its containing less curd; and in its possessing a greater proportion of sugar.

MILK, COWS'.* The milk of women, mares, and asses, nearly agree in their qualities; that of cows, goats, and sheep, possess properties rather different. Of these, cows' milk approaches nearest to that yielded by the female breast, but differs very much in respect to the aroma; it contains a larger proportion of cream and cheese, and less serum than human milk; also less sugar than mares' and asses' milk.

Cows' milk forms a very essential part of human sustenance, being adapted to every state and age of the body; but particularly to infants, after being weaned.

MILK, EWES'. This resembles almost precisely that of the cow; its cream, however, is more abundant, and yields a butter not so consistent as cows' milk butter. It makes excellent cheese.

MILK, GOATS'. It resembles cows', except in its greater consistence; like that milk, it throws up abundance of cream, from which butter is easily obtained.

MILK, HUMAN. The white, sweetish fluid, secreted by the glandular fabric of the breasts of women. The *secretory organ* is constituted by the great conglomerate glands situated in the fat of both breasts, above the musculus pectoralis major. From each acinus composing a mammary gland, there arises a radicle of a *lactiferous* or *galactiferous* duct. All these canals gradually converging, are terminated without anastomosis, in the papillæ of the breasts, by many orifices, which, upon pressure, pour forth milk. The smell of fresh-drawn milk is peculiar, animal, fatuous, and not disagreeable. Its taste sweetish, soft, bland, agreeable. The specific gravity is greater than that of water, but it is lighter than blood; hence it swims on it. Its colour is white and opake. In consistence it is oily and aqueous. A drop put on the nail flows slowly down, if the milk be good.

Time of Secretion.—The milk most frequently begins to be secreted in the last months of pregnancy; but, on the third day after delivery, a serous milk, called *Colostrum*, is separated; and at length pure milk is secreted very copiously into the breasts, that from its abundance often spontaneously drops from the nipples.

If the secretion of milk be daily promoted by suckling an infant, it often continues many years, unless a fresh pregnancy supervene. The quantity usually secreted within twenty-four hours, by nurses, is various, according as the nourishment may be more or less chylous. It appears that not more than two pounds of milk are obtained from five or six pounds of meat. But there have been known nurses who have given from their breasts two, or even more than three pounds, in addition to that which their child has sucked. That the origin of the milk is derived from chyle carried with the blood of the mammary arteries into the glandular fabric of the breasts, is evident from its more copious secretion a little after meals; its diminished secretion from fasting; from the smell and taste of food or medicines in the secreted milk; and, lastly, from its occasional spontaneous *acescence;* for humours perfectly animal become putrid.

The *milk of a woman* differs: 1. In respect to *food*. The milk of a woman who suckles, living upon vegeto-animal food, never acesces nor coagulates spontaneously, although exposed for many weeks to the heat of a furnace. But it evaporates gradually in an open vessel, and the last drop continues thin, sweet, and bland. The reason appears to be that the caseous and cremoraceous parts cohere together by means of the sugar, more intimately than in the milk of animals, and do not so easily separate; hence its acescence is prevented. It does *acesce,* if mixed or boiled with vinegar, juice of lemons, supertartrate of potash, dilute sulphuric acid, or with the human stomach. It is *coagulated* by the acid of salt, or nitre, and by an acid gastric juice of the infant; for infants often vomit up the coagulated milk of the nurse. The milk of a sucking woman, who lives upon vegetable food only, like cows' milk, easily and of its own accord acesces, and is acted upon by all coagulating substances like the milk of animals. 2. In respect *of the time of digestion.* During the first hours of digestion the chyle is crude, and the milk less subacted; but towards the twelfth hour after eating, the chyle is changed into blood, and then the milk becomes yellowish and nauseous, and is spit out by the infant. Hence the best time for giving suck is about the fourth or fifth hour after meals. 3. In respect *of the time after delivery*. The milk secreted immediately after delivery is serous, purges the bowels of the infant, and is called *colostrum*. But in the following days it becomes thicker and more pure, and the longer a nurse suckles, the thicker the milk is secreted; thus new-born infants cannot retain the milk of a nurse who has given suck for a twelve-month, on account of its spissitude. 4. In respect *of food and medicines*. Thus if a nurse eat garlic, the milk becomes highly impregnated with its odour, and is disagreeable. If she indulge too freely in the use of wine or beer, the infant becomes ill. From giving a purging medicine to a nurse, the child also is purged; and, lastly, children affected with tormina of the bowels, arising from acids, are often cured by giving the nurse animal food. 5. In respect *of the affections of the mind*. There are frequent examples of infants being seized with convulsions from sucking mothers irritated by anger. An infant of one year old, while he sucked milk from his enraged mother, on a sudden was seized with a fatal hæmorrhage, and died. Infants at the breast in a short time pine away, if the nurse be afflicted with grievous care; and there are also infants who, after every coition of the mother, or even if she menstruate, are taken ill.

The use of the mother's milk is, 1. It affords the natural *aliment* to the new-born infant, as milk differs little from chyle. Those children are the strongest who are nourished the longest by the mother's milk. 2. The *colostrum* should not be rejected; for it relaxes the bowels, which, in new-born infants, ought to be open, to clear them of the *meconium*. 3. *Lactation* defends the mother from a dangerous reflux of the milk into the blood, whence lacteal metastasis, and leucorrhæa are so frequent in lying-in women, who do not give suck. The motion of the milk also being hastened through the breast by the sucking of the child, prevents the very common induration of the breast, which arises in consequence of the milk being stagnated. 4. *Men may live* upon milk, unless they have been accustomed to the drinking of wine. For all nations, the Japanese alone excepted, use milk, and many live upon it alone.

MILK, MARES'. This is thinner than that of the cow, but scarcely so thin as human milk. Its cream cannot be converted into butter by agitation. The whey contains sugar.

Milk blotches. An eruption of white vesicles, which assume a dark colour, resembling the blackening of the small-pox, and are succeeded by scabs producing an ichorous matter, attended with considerable itching. It generally appears on the forehead and scalp, extending half over the face, and at times even proceeding farther. The period of its attack is the time of teething; and it is probably the same disease as the *crusta lactea*.

Milk-fever. See *Puerperal fever*.

Milk-teeth. See *Teeth*.

Milk-thistle. The leaves of this plant, when young, surpass, when boiled, the finest cabbage, and possesses diuretic qualities. See also *Carduus marianus*.

Milk-vetch. See *Astragalus*.

Milk-wort. See *Polygala*.

Milk-wort, rattle-snake root. See *Polygala senega*.

Millefo′lium. (From *mille*, a thousand, and *folium*, a leaf; named from its numerous leaves.) *Common yarrow*, or *milfoil*. See *Achillea*.

Millemo′rbia. (From *mille*, a thousand, and *morbus*, a disease, so called from its use in many diseases.) See *Scrophularia nodosa*.

Mille′pedæ. See *Oniscus*.

Mille′pedes. (From *mille*, a thousand, and *pes*, a foot; named from their numerous feet.) See *Oniscus asellus*.

Millet seed. See *Panicum miliaceum*.

Millet seed, Indian. See *Panicum Italicum*.

Mi′llium. (From *mille*, a thousand; so called from the multitude of its seed.) *Milium*. The millet.

Mill-mountain. See *Linum catharticum*.

Milpho′sis. Μιλφωσις. A baldness of the eyebrows.

Mi′ltos. (Μιλτος.) Minium, or red-lead.

Miltwaste. See *Ceterach*.

Milzade′lla. (From *milza*, the spleen, Span.; so called from its supposed virtues in diseases of the spleen.) The herb archangel.

MIMO′SA. (From *mimus*, an actor or imitator, meaning a sort of imitative plant, the motions of which mimic the sensibility of animal life.). The name of a genus of plants in the Linnæan system. Class, *Polygamia*. Order, *Monœcia*. The sensitive plant.

Mimo′sa ca′techu. The former name of the tree which affords the terra japonica. See *Acacia catechu*.

Mimo′sa nilo′tica. Supposed to be the tree which afforded the gum-arabic, but this is now considered to be the *acacia vera*; which see.

Mimo′sa se′negal. The systematic name of the tree from which the gum senegal exudes. The gum is brought from the country through which the river Senegal runs, in loose or single drops, much larger than gum-arabic. It is similar in virtue and quality to the gum-arabic, and the gum which exudes in this climate from the cherry-tree.

Mindererus spirit. See *Ammoniæ acetatis liquor*.

MINERA'LIA. See *Minerals.*

MINERA'LOGY. That part of natural history which relates to minerals.

Mineral poisons. See *Poisons.*

MINERAL WATERS. *Aquæ minerales. Aquæ medicinales.* Waters holding minerals in solution are called *mineral waters.* But as all water, in a mineral state, is impregnated, either more or less, with some mineral substances, the name *mineral waters,* should be confined to such waters as are sufficiently impregnated with mineral matters to produce some sensible effects on the animal economy, and either to cure or prevent some of the diseases to which the human body is liable. On this account, these waters might be with much more propriety called *medicinal waters,* were not the name by which they are commonly known too firmly established by long use.

The mineral waters which are the most esteemed, and consequently the most resorted to for the cure of diseases, are those of,

1. Aix.
2. Barege.
3. Bath.
4. Bristol.
5. Buxton.
6. Borset.
7. Cheltenham.
8. Carlsbad.
9. Epsom.
10. Harrowgate.
11. Hartfell.
12. Holywell.
13. Malvern.
14. Matlock.
15. Moffat.
16. Pyrmont.
17. Scarborough.
18. Spa.
19. Sedlitz.
20. Sea-water.
21. Seltzer.
22. Tunbridge.
23. Vichy, and others of less note.

For the properties and virtues of these consult their respective heads.

Fourcroy divides all mineral and medicinal waters into nine orders, viz.

1. Cold acidulous waters.
2. Hot or thermal acidulous waters.
3. Sulphuric saline waters.
4. Muriatic saline waters.
5. Simple sulphureous waters.
6. Sulphurated gazeous waters.
7. Simple ferruginous waters.
8. Ferruginous and acidulous waters.
9. Sulphuric ferruginous waters.

Dr. Saunders arranges mineral waters into the following classes:

1. Simple cold.
2. ——— thermal.
3. ——— saline.
4. Highly carbonated alkaline.
5. Simple carbonated chalybeate.
6. Hot carbonated chalybeate.
7. Highly carbonated chalybeate.
8. Saline carbonated chalybeate.
9. Hot saline highly carbonated chalybeate.
10. Vitriolated chalybeate.
11. Cold, sulphureous.
12. Hot, alkaline, sulphureous.

In order to present the reader, under one point of view, with the most conspicuous features in the composition of the mineral waters of this and some other countries, the following Synoptical Table is subjoined, from Dr. Saunders' work on mineral waters.

The reader will please to observe, that under the head of *Neutral Purging Salts,* are included the sulphates of soda and magnesia, and the muriates of lime, soda, and magnesia. The power which the earthy muriates may possess of acting on the intestinal canal, is not quite ascertained, but, from their great solubility, and from analogy with salts, with similar component parts, we may conclude that this forms a principal part of their operation.

The reader will likewise observe, that where the spaces are left blank, it signifies that we are ignorant whether any of the substance at the head of the column is contained in the water; that the word *none,* implies a certainty of the absence of that substance; and the term *uncertain,* means that the substance is contained, but that the quantity is not known.

A SYNOPTICAL TABLE, showing the Composition of MINERAL WATERS.

CLASS.	NAME.	Highest Temperature.	Contained in an English Wine Pint of 28.875 Cubic Inches.						
			Azotic Gas.	Carbonic Acid Gas.	Sulphuretted Hydrogen.	Carbonated Soda.	Neutral Purging Salts.	Selenite and Earthy Carbonates.	Oxide of Iron.
		Fahrenheit.	Cubic Inches.	Cubic Inches.	Cubic Inches.	Grains.	Grains.	Grains.	Grains.
Simple cold - - -	Malvern			uncertain	none	none	uncertain	uncertain	none
	Holywell				none	none	uncertain	uncertain	none
Simple thermal - -	Bristol	74°	uncertain	5.75	none	none	2.81	5.16	none
	Matlock	66°		uncertain	none	none	uncertain	uncertain	none
	Buxton	82°	0.474	uncertain	none	none	0.25	1.625	none
Simple saline - - -	Sedlitz			1.	none	none	185.6	8.68	none
	Epsom				none	none	40. ?	8. ?	none
	Sea				none	none	237.5	6.	none
Highly carbonated alkaline	Seltzer			17.	none	4.	17.5	8.	none
Simple carbonated chalybeate	Tunbridge		0.675	1.325	none	none	0.344	0.156	0.125
Hot carbonated chalybeate	Bath	116°	1.?	1.?	none	none	10.?	10. ?	uncertain
Highly carbonated chalybeate - - - -	Spa			12.79	none	1.47	4.632	1.47	0.56
	Pyrmont			26.	none	none	7.13	23.075	0.56
Saline, carbonated chalybeate - - - -	Cheltenham		uncertain	5.687	uncertain	none	62.125	6.85	0.625
	Scarlborough			uncertain	none	none	20.	10.	uncertain
Hot, saline, highly carbonated chalybeate - - -	Vichy	120° ?		uncertain	none	uncertain		uncertain	uncertain
	Carlsbad	165°		uncertain	none	11.76	47.04	4.15	uncertain
Vitriolated chalybeate - -	Hartfell				none	none	none	none	4.815*
Cold sulphureous - -	Harrowgate		0.875	1.	2.375	none	91.25	3.	none
	Moffat		0.5	0.625	1.25	none	4.5	none	none
Hot, alkaline, sulphureous	Aix	143°		uncertain	uncertain	12.	5.	4.75	none
	Borset	132°		uncertain	uncertain	uncertain	uncertain		none
	Barege	120°			uncertain	2.5	0.5	uncertain	none

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of iron (this salt, when crystallized, containing 28 per cent. of oxide of iron, according to Kirwan,) Dr. Henry, in his epitome of chemistry, gives the following concise and accurate account for the analysis of mineral waters:

Water is never presented by nature in a state of complete purity. Even when collected as it descends in the form of rain, chemical tests detect in it foreign ingredients. And when it has been absorbed by the earth, has traversed its different strata, and is returned to us by springs, it is found to have acquired various impregnations. The readiest method of judging of the contents of natural waters, is by applying what are termed tests, or re-agents, *i. e.* substances which, on being added to a water, exhibit by the phenomena they produce, the nature of the saline and other ingredients. For example, if, on adding an infusion of litmus to any water, its colour is changed to red, we infer that the water contains an uncombined acid; if this change ensue even after the water has been boiled, we judge that the acid is a fixed and not a volatile one; and if, on adding the muriate of barytes, a precipitate falls down, we safely conclude that the peculiar acid present in the water is either entirely or in part the sulphuric acid. Dr. Henry first enumerates the tests generally employed in examining mineral waters, and describes their application, and afterwards indicates by what particular tests the substances generally found in waters may be detected.

A. *Infusion of Litmus. Syrup of Violets, &c.*

As the infusion of litmus is apt to spoil by keeping, some solid litmus should be kept. The infusion is prepared by steeping this substance, first bruised in a mortar, and tied up in a thin rag, in distilled water, which extracts its blue colour. If the colour of the infusion tends too much to purple, it may be amended by a drop or two of pure ammonia; but of this no more should be added than what is barely sufficient, lest the delicacy of the test should be impaired. The syrup of violets is not easily obtained pure. The genuine syrup may be distinguished from the spurious by a solution of corrosive sublimate, which changes the former to green, while it reddens the latter. When it can be procured genuine, it is an excellent test of acids, and may be employed in the same manner as the infusion of litmus. Paper stained with the juice of the marsh violet, or with that of radishes, answers a similar purpose. In staining paper for the purpose of a test, it must be used unsized; or, if sized, it must previously be washed with warm water; because the alum which enters into the composition of the size will otherwise change the vegetable colour to a red.

Infusion of litmus is a test of most uncombined acids.

If the infusion redden the unboiled but not the boiled water under examination, or if the red colour occasioned by adding the infusion to a recent water, return to blue on boiling, we may infer that the acid is a volatile one, and most probably the carbonic acid. Sulphuretted hydrogen gas, dissolved in water, also reddens litmus, but not after boiling. To ascertain whether the change be produced by carbonic acid, or sulphuretted hydrogen, when experiment shows that the reddening cause is volatile, add a little lime-water. This, if carbonic acid be present, will occasion a precipitate, which will dissolve with effervescence, on adding a little muriatic acid. Sulphuretted hydrogen may also be contained in the same water, which will be ascertained by the tests hereafter to be described.

Paper tinged with litmus is also reddened by the presence of carbonic acid, but regains its blue colour by drying. The mineral and fixed acids redden it permanently. That these acids, however, may produce their effect, it is necessary that they should be present in a sufficient proportion.

Infusion of litmus reddened by vinegar—Spirituous tincture of Brazil-wood—Tincture of turmeric and paper stained with each of these three substances—Syrup of violets. All these different tests have one and the same object.

1. Infusion of litmus reddened by vinegar, or litmus paper reddened by vinegar, has its blue colour restored by alkalis and pure earths, and by carbonated alkalis and earths.

2. Turmeric paper and tincture are changed to a reddish brown by alkalis, whether pure or carbonated, and by pure earths; but not by carbonated earths.

3. The red infusion of Brazil wood, and paper stained with it, become blue by alkalis and earths, and even by the latter, when dissolved by an excess of carbonic acid. In the last-mentioned case, however, the change will either cease to appear or be much less remarkable, when the water has been boiled.

4. Syrup of violets, when pure, is by the same causes turned green, as also paper stained with the juices of violets, or radishes.

B. *Tincture of Galls.*

Tincture of galls is the test generally employed for discovering iron, with all the combinations of which it produces a black tinge, more or less intense, according to the quantity of iron. The iron, however, in order to be detected by this test, must be in the state of red oxide, or, if oxidated in a less degree, its effects will not be apparent, unless after standing some time in contact with air. By applying this test before and after evaporation, or boiling, we may know whether the iron be held in solution by carbonic acid, or a fixed acid; for,

1. If it produce its effects before the application of heat, and not afterwards, carbonic acid is the solvent.

2. If after as well as before, a mineral acid is the solvent.

3. If, by the boiling, a yellowish powder be precipitated, and yet galls continue to strike the water black afterwards, the iron, as often happens, is dissolved both by carbonic acid and a fixed acid. A neat mode of applying the gall test was used by M. Klaproth, in his analysis of the Carlsbad water. A slice of the gall-nut was suspended by a silken thread, in a large bottle of the recent water; and so small was the quantity of iron, that it could only be discovered in water fresh from the spring.

C. *Sulphuric Acid.*

1. Sulphuric acid discovers, by a slight effervescence, the presence of carbonic acid, whether uncombined or united with alkalis, or earths.

2. If lime be present, whether pure or uncombined, the addition of sulphuric acid occasions, after a few days, a white precipitate.

3. Barytes is precipitated instantly in the form of a white powder.

4. Nitrous and muriatic salts, on adding sulphuric acid and applying heat, are decomposed; and if a stopper, moistened with pure ammonia, be held over the vessel, white clouds appear. For distinguishing whether nitric or muriatic acid be present, rules will be given hereafter.

Nitric and Nitrous Acids.

These acids, if they occasion effervescence, give the same indications as the sulphuric. The nitrous acid has been recommended as a test distinguishing between hepatic waters that contain sulphuret of potash, and those that only contain sulphuretted hydrogen gas. In the former case, a precipitate ensues on adding nitrous acid, and a very fœtid smell arises; in the latter, a slight cloudiness only appears, and the smell of the water becomes less disagreeable.

D. *Oxalic Acid and Oxalates.*

This acid is a most delicate test of lime, which it separates from all its combinations.

1. If a water which is precipitated by oxalic acid, becomes milky on adding a watery solution of carbonic acid gas, or by blowing air through it by means of a quill, or glass tube, we may infer that pure lime (or barytes which has never yet been found pure in water) is present.

2. If the oxalic acid occasion a precipitate before but not after boiling, the lime is dissolved by an excess of carbonic acid.

3. If, after boiling, by a fixed acid: a considerable excess of any of the mineral acids, however, prevents the oxalic acid from occasioning a precipitate, even though lime be present; because some acids decompose the oxalic, and others, dissolving the oxalate of lime, prevent it from appearing.

The oxalates of ammonia, or of potash, (which may easily be formed by saturating their respective carbonates with a solution of oxalic acid) are not liable to the above objections, and are preferable, as re-agents, to the uncombined acid. Yet even these oxalates fail to detect lime when supersaturated with muriatic or nitric acids; and if such an excess be present, it must be saturated before adding the test with pure ammonia. Fluate of ammonia is the best test of lime. It is made by adding carbonate of ammonia to diluted fluoric acid.

E. *Pure Alkalis and Carbonated Alkalis.*

1. The pure fixed alkalis precipitate all earths and metals, whether dissolved by volatile or fixed menstrua, but only in certain states of dilution: for example, sulphate of alumine may be present in water, in the proportion of 4 grains to 500, without being discovered by pure fixed alkalis. As the alkalis precipitate so many substances, it is evident they cannot afford any precise information when employed as re-agents. From the colour of the precipitate, as it approaches to pure white, or recedes from it, an experienced eye will judge that the precipitated earth contains less or more of the metallic admixture.

2. Pure fixed alkalis decompose all salts with basis of ammonia, which becomes evident by its smell, and also by the white fumes it exhibits when a stopper is brought near it, moistened with muriatic acid.

3. Carbonates of potash and soda have similar effects.

4. Pure ammonia precipitates all earthy and metallic salts. Besides this property, it also imparts a deep blue colour to any liquid that contains copper in a state of solution.

Carbonate of ammonia has the same properties, except that it does not precipitate magnesia from its combinations. Hence, to ascertain whether this earth be present in any solution, add the carbonate of ammonia till no further precipitation ensues, filter the liquor, and then add pure ammonia. If any precipitation now occurs, we may infer the presence of magnesia.

F. *Lime-Water.*

1. Lime-water is applied for the purposes of a test, chiefly for detecting carbonic acid. Let any liquor, supposed to contain this acid, be mixed with an equal bulk of lime-water. If carbonic acid be present, either free or combined, a precipitate will immediately appear, which, on adding a few drops of muriatic acid, will immediately dissolve with effervescence.

2. Lime-water will immediately show the presence of corrosive sublimate, by a brick-dust coloured sediment. If arsenic be present in any liquid, lime-water, when added, will occasion a precipitate, consisting of lime and arsenic, which is very difficultly soluble in water. This precipitate, when mixed up with oil, and laid on hot coals, yields the well-known garlic smell of arsenic.

G. *Pure Barytes, and its Solution in Water.*

1. A solution of pure barytes is even more effectual than lime-water, in detecting the presence of carbonic acid, and is much more portable and convenient; since from the crystals of this earth, the solution may at any time be prepared. In discovering fixed air, the solution of barytes is used similarly to lime-water; and, if this acid be present, gives, in like manner, a precipitate soluble with effervescence in muriatic acid.

Pure strontites has similar virtues as a test.

H. *Metals.*

1. Of the metals, silver and mercury are tests of the presence of sulphurets, and of sulphuretted hydrogen gas. If a little quicksilver be put into a bottle, containing water impregnated with either of these substances, its surface soon acquires a black film, and, on shaking, a blackish powder separates from it. Silver is immediately tarnished from the same cause.

2. The metals also may be used as tests of each other, on the principle of elective affinity. Thus, for example, a polished iron plate, immersed in a solution of sulphate of copper, soon acquires a coat of this metal, and the same in other similar examples.

I. *Sulphate of Iron.*

This is the only one of the sulphates, except that of silver, applicable to the purposes of a test. When used in this view, it is generally employed to ascertain the presence of oxygenous gas, of which a natural water may contain a small quantity.

A water, suspected to contain this gas, may be mixed with a little recently dissolved sulphate of iron, and kept corked up. If an oxyde of iron be precipitated in the course of a few days, the water may be inferred to contain oxygenous gas.

Sulphate, Nitrate, and Acetate of Silver.

These solutions are, in some measure, applicable to the same purpose.

1. They are peculiarly adapted to the discovery of muriatic acid and muriates. For the silver, quitting the nitric or other acid, combines with the muriatic, and forms a flaky precipitate, which at first is white, but, on exposure to the sun's light, acquires a violet colour. This precipitate, Dr. Black states, to contain, in 1000 parts, as much muriatic acid as would form 425 parts and a half of crystallized muriate of soda, which estimate scarcely differs at all from that of Klaproth. A precipitation, however, may arise from other causes, which it may be proper to state.

2. The solutions of silver in acids are precipitated by carbonated alkalis and earths. The agency of these may be prevented by previously adding a few drops of the same acid in which the silver is dissolved.

3. The nitrate and acetate of silver are decomposed by the sulphuric and sulphurous acids; but this may be prevented by adding previously a few drops of nitrate or acetate of barytes, and after allowing the precipitate to subside, the clear liquor may be decanted, and the solution of silver added. Should a precipitation now take place, the presence of muriatic acid, or some one of its combinations, may be suspected. To obviate uncertainty, whether a precipitation be owing to sulphuric or muriatic acid, a solution of sulphate of silver may be employed, which is affected only by the latter acid.

4. The solutions of silver are precipitated by extractive matters; but in this case also the precipitate is discoloured, and is soluble in nitrous acid.

K. *Nitrate and Acetate of Lead.*

1. Acetate of lead, the most eligible of these two tests, is precipitated by sulphuric and muriatic acids; but as, of both these, we have much better indicators, it is not necessary to enlarge on its application to this purpose.

2. The acetate is also a test of sulphuretted hydrogen and of sulphurets of alkalis, which occasion a black precipitate; and if a paper, on which characters are traced with a solution of acetate of lead, be held over a portion of water containing sulphuretted hydrogen, they are soon rendered visible.

3. The acetate of lead is employed in the discovery of uncombined boracic acid, a very rare ingredient of waters. To ascertain whether this be present, some cautions are necessary. The uncombined alkalis and earths (if any be suspected) must be saturated with acetic acid. The sulphates must be decomposed by acetate or nitrate of barytes, and the muriates by acetate or nitrate of silver. The filtered liquor, if boracic acid be contained in it, will give a precipitate soluble in nitric acid of the specific gravity of 1.3.

L. *Nitrate of Mercury prepared with and without Heat.*

This solution, differently prepared, is sometimes employed as a test. But, since other tests answer the same purposes more effectually, it is not absolutely necessary to have these tests.

M. *Muriate, Nitrate, and Acetate of Barytes.*

1. These solutions are all most delicate tests of sulphuric acid, and of its combinations, with which they give a white precipitate, insoluble in dilute muriatic acid. They are decomposed, however, by carbonates of alkalis; but the precipitate occasioned by these is soluble in dilute muriatic and nitric acid with effervescence, and may even be prevented by adding

previously a few drops of the acid contained in the barytic salt.

One hundred grains of dry sulphate of barytes (according to Klaproth, p. 168.) contain about 45 one-fifth of sulphuric acid, of the specific gravity 1850, according to Clayfield, 33 of acid of s. g. 2240, according to Thenard, after calcination about 25. These estimates differ very considerably. From Klaproth's experiments, it appears that 1000 grains of sulphate of barytes indicate 595 of desiccated sulphate of soda, or 1416 of the crystallized salt. The same chemist has shown that 100 grains of sulphate of barytes are produced by the precipitation of 71 grains of sulphate of lime.

2. Phosphoric salts also occasion a precipitate with these tests, which is soluble in muriatic acid without effervescence.

N. *Prussiates of Potash and Lime.*

Of these two, the prussiate of potash is the most eligible. When pure it does not speedily assume a blue colour on the addition of acid, nor does it immediately precipitate muriated barytes. Prussiate of potash is a very sensible test of iron, with the solutions of which in acids it produces a Prussian blue precipitate, in consequence of a double elective affinity. To render its effect more certain, however, it may be proper to add previously, to any water suspected to contain iron, a little muriatic acid, with a view to the saturation of uncombined alkalies, or earths, which, if present, prevent the detection of any minute portions of iron.

1. If a water, after boiling and filtration, does not afford a blue precipitate on the addition of prussiate of potash, the solvent of the iron may be inferred to be a volatile one, and probably the carbonic acid.

2. Should the precipitation ensue in the boiled water, the solvent is a fixed acid, the nature of which must be ascertained by other tests.

O. *Solution of Soap in Alcohol.*

This solution may be used to ascertain the comparative hardness of waters. With distilled water it may be mixed without producing any change; but, if added to a hard water, it produces a milkiness, more or less considerable as the water is less pure; and from the degree of milkiness an experienced eye will judge of its quality. The acids, alkalis, and all earthy and metallic salts, decompose soap, and occasion that property in water termed hardness.

Alcohol.

Alcohol, when mixed with any water in the proportion of about an equal bulk, precipitates all the salts which it is not capable of dissolving.

P. *Hydro-sulphuret of Ammonia.*

This and other sulphurets, as well as water saturated with sulphuretted hydrogen, may be employed in detecting lead and arsenic, with the former of which they give a black, and with the latter a yellowish precipitate. As lead and arsenic, however, are never found in natural waters, these tests are not required.

MINERALS. (*Mineralia*; from *mina*, a mine of metal.) All substances, which do not possess organization, or are not produced by an organized body, belong to the class called minerals. Among this varied class of materials, which require the attention of the chemist and manufacturer, many are compounded of such principles, and formed under such circumstances and situations in the earth, that it is difficult to distinguish them without having recourse to the test of experiment; several are formed with considerable regularity as to the proportion of their principles, their fracture, their colour, specific gravity, and figure of crystallization.

Mineral bodies which enter into the composition of the globe, are classed by mineralogists under four heads:—1. Earths. 2. Salts. 3. Inflammable fossils; and 4. Metals and their ores. Under the term earths are arranged stones and earths, which have no taste, and do not burn when heated with contact of air.

Under the second, salts, or those saline substances which melt in water and do not burn, they require, according to Mr. Kirwan, less than two hundred times their weight of water to dissolve them.

By inflammable fossils are to be understood all those minerals not soluble in water, and exhibiting a flame more or less evident when exposed to fire in contact with air.

The fourth class, or ores, are compound bodies. Nature has bestowed their proper metallic appearance on some substances, and when this is the case, or they are alloyed with other metals, or semi-metals, they are called native metals. But such as are distinguished, as they commonly are, in mines, in combination with some other unmetallic substances, are said to be mineralized. The substance that sets them in that state, is called the mineralizer, and the compound of both an ore. For example, in the common ore of copper, this metal is found oxidized, and the oxide combined with sulphur. The copper may be considered as mineralized with oxygen and sulphur, and the compound of the three bodies forms an ore of copper.

Mineral salts. See *Salts.*

MI'NIMUM. A minim. The sixtieth part of a fluid-drachm. An important change has been adopted in the last London Pharmacopœia, for the mensuration of liquids, and the division of the wine pint, to insure accuracy in the measurement of quantities of liquids below one drachm. The number of drops contained in one drachm has been assumed to be sixty; and taking water as a standard, this number, though by no means accurate, would still be sufficient for ordinary purposes; but when other liquids of less specific gravity are used, a much larger number is required to fill the same measure, as of proof spirit, 140 drops are required to equal the bulk of 60 of water, dropped from the same vessel. If, therefore, in the composition of medicines, measures suited to the standard of water were used occasionally only, and it was generally assumed that 60 drops were equal to one fluid-drachm, and one fluid-drachm was substituted for 60 drops prescribed, twice the dose intended would be given. There are further objections to the use of drops; that their bulk is influenced by the quantity of liquid contained in the bottle from which they fall, by the thickness of the lip, and even by the inequalities on the surface of the lip of the same bottle; that volatile liquids, to which this mode is most commonly applied, are thus exposed with extensive surfaces, and their evaporation promoted; and on all these accounts the adoption of some decisive convenient and uniform substitute became necessary. The subdivision of the wine pint has, therefore, been extended to the sixtieth part of the fluid-drachm, which is termed minim; and glass measures expressive of such subdivision, have been adopted by the college.

Mi'nium. Red lead. See *Lead.*

Mi'nium græco'rum. Native cinnabar.

Mint, common. See *Mentha viridis.*

Mint, pepper. See *Mentha piperita.*

Mint, water. See *Mentha aquatica,*

Miscarriage. See *Abortion.*

Misere're mei. (Have compassion on me; so called from its unhappy torments.) The iliac passion.

Mislaw. See *Musa paradisiaca.*

Misochy'micus. Thus some were called who professed themselves enemies to the chemists, and their enthusiastic conceits.

Mispickle. A white, brilliant, granulated iron ore, composed of iron in combination with arsenic.

Misletoe. See *Viscum.*

MISTU'RA. A mixture. A fluid composed of two or more ingredients. It is mostly contracted in prescriptions thus, *mist.* e. g.—*f. mist.* which means, let a mixture be made.

Mistu'ra ammoni'aci. *Lac ammoniaci.* Mixture of ammoniacum. "Take of ammoniacum, two drachms; of water, half a pint; rub the ammoniacum with the water gradually added, till they are thoroughly mixed."

Mistu'ra amygdala'rum. *Lac amygdalæ.* Almond mixture, or emulsion. "Take of almond confection, two ounces; distilled water, a pint; gradually add the water to the almond confection, rubbing them together, till properly mixed; then strain."

Mistu'ra assafœ'tidæ. *Lac assafœtidæ.* Mixture of assafœtida. "Take of assafœtida, two drachms; water, half a pint; rub the assafœtida with the water gradually added, till they are thoroughly mixed."

Mistu'ra ca'mphoræ. Camphor mixture. "Take of camphor, half a drachm; rectified spirit, ten minims; water, a pint. First rub the camphor with the spirit, then with the water gradually added, and strain the liquor." A very elegant preparation of camphor, for delicate stomachs, and those who cannot bear it in substance, as an antispasmodic and nervine. There is a great loss of camphor in making it as directed by the pharmacopœia. Water can only take up a certain quantity. For its virtues, see *Laurus camphora.*

Mistu'ra co'rnu u'sti. *Decoctum album.* Decoction of hartshorn. "Take of hartshorn, burnt and prepared, two ounces; acacia gum, powdered, an ounce; water, three pints. Boil down to two pints, constantly stirring, and strain." This is a much weaker absorbent than the mistura cretæ, but is much more agreeable to most people. It forms an excellent drink in fevers attended with diarrhœa, and acidities of the primæ viæ.

Mistu'ra cre'tæ. Chalk mixture. "Take of prepared chalk, half an ounce; refined sugar, three drachms; gum arabic, powdered, half an ounce; water, a pint. Mix." A very useful and pleasant form of administering chalk as an adstringent and antacid. It is particularly calculated for children, in whom it allays the many deranged actions of the primæ viæ, which are produced by acidities. Dose, one ounce to three, frequently. See *Creta* and *Carbonas calcis.*

Mistu'ra fe'rri compo'sita. "Take of myrrh, powdered, a drachm; subcarbonate of potash, twenty-five grains; rose-water, seven fluid ounces and a half; sulphate of iron, powdered, a scruple; spirit of nutmeg, half a fluid ounce; refined sugar, a drachm. Rub together the myrrh, the subcarbonate of potash and sugar; and, during the trituration, add gradually, first, the rose water and spirit of nutmegs, and last, the sulphate of iron. Pour the mixture immediately into a proper glass bottle, and stop it close." This preparation is the celebrated mixture of Dr. Griffiths. A chemical decomposition is effected in forming this mixture, a subcarbonate of iron is formed, and a sulphate of potash.

Mistu'ra guai'aci. "Take of guaiacum gum-resin, a drachm and a half; refined sugar, two drachms; mucilage of acacia gum, two fluid drachms; cinnamon water, eight fluid ounces. Rub the guaiacum with the sugar, then with the mucilage; and, when they are mixed, pour on the cinnamon water gradually, rubbing them together." For its virtues see *Guaiacum*.

Mistu'ra mo'schi. "Take of musk, acacia gum, powdered, refined sugar, of each a drachm; rose-water, six fluid ounces. Rub the musk first with the sugar, then with the gum, and add the rose-water by degrees." An excellent diaphoretic and antispasmodic. It is by far the best way of administering musk, when bolusses cannot be swallowed. Dose, one ounce to three, frequently.

Mithridate mustard. See *Thlaspi campestre.*

Mithrida'tium. The electuary called *Mithridate*, from Mithridates, king of Pontus and Bithynia, who experiencing the virtues of the simples separately, afterwards combined them; but then the composition consisted of but few ingredients, viz. twenty leaves of rue, two walnuts, two figs, and a little salt: of this he took a dose every morning, to guard himself against the effects of poison.

MITRAL VALVES. *Valvulæ mitrales.* The valves of the left ventricle of the heart are so called from their resemblance to a mitre.

Mi'va. An ancient term for the form of a medicine, not unlike a thick syrup, now called *Marmalade.*

MIXTURE. 1. See *Mistura.*

2. Chemical mixture should be distinguished from chemical solution; in the former, the aggregate particles can again be separated by mechanical means, and the proportion of the different particles determined; but, in solution, no mechanical power whatsoever can separate them.

Mo'chlia. (From μοχλος, a lever.) A reduction of the bones from an unnatural to a natural situation.

Mo'chlica. (From μοχλευω, to move.) Violent purges.

MODI'OLUS. (Dim. of *modus*, a measure.) The nucleus, as it were, of the cochlea of the ear is so termed. It ascends from the basis of the cochlea to the apex.

Mofette. See *Nitrogen.*

MOFFAT WATER. A cold sulphureous water, of a very simple composition. Moffat, a village situated about fifty-six miles south-west of Edinburgh, affords this mineral water; when first drawn, it appears rather milky and bluish; the smell is exactly similar to that of Harrowgate; the smell is sulphureous and saline, without any thing bitter. It sparkles somewhat on being poured from one glass to another.

According to Dr. Garnett's analysis, a wine gallon of Moffat water contains thirty-six grains of muriate of soda, five cubic inches of carbonic acid gas, four of azotic gas, and ten of sulphuretted hydrogen, making altogether nineteen cubic inches of gas. Moffat water is, therefore, very simple in its composition, and hence it produces effects somewhat similar to those of Harrowgate. It is, perhaps, on this account also that it so soon loses the hepatic gas, on which depends the greatest part of its medicinal power. The only sensible effect of this water is that of increasing the flow of urine; when it purges, it appears rather to take place from the excessive dose than from its mineral ingredients. This water appears to be useful chiefly in cutaneous eruptions, and as an external application at an increased temperature, scrofula in its early stage appears to be alleviated by it; it is also used as an external application to irritable ulcers, and is recommended in dyspepsia, and where there is inaction of the alimentary canal.

Mogila'lia. (From μογις, difficulty, and λαλεω, to speak.) A difficulty of speech.

Mo'la. (Heb.) 1. The knee-pan; so named because it is shaped like a mill-stone. 2. A mole, or shapeless mass of flesh in the uterus. See *Mole.*

MOLAR GLANDS. *Glandulæ molares.* Two salival glands situated on each side of the mouth, between the masseter and buccinator muscles, the excretory ducts of which open near the last dens molaris.

MOLA'RIS. (From *molaris*, a grindstone; because they grind the food.) A double-tooth. See *Teeth.*

Molasses. See *Saccharum.*

Molda'vica. See *Dracocephalum.*

MOLE. *Mola.* By this term authors have intended to describe different productions of, or excretions from the uterus.

By some it has been used to signify every kind of fleshy substance, particularly those which are properly called polypi; by others, those only which are the consequence of imperfect conception, or when the ovum is in a morbid or decayed state; and by many, which is the most popular opinion, every coagulum of blood which continues long enough in the uterus to assume somewhat of an organized form, and to have only the fibrous part, as it has been called, remaining, is denominated a mole.

There is surely much impropriety, says Dr. Denman, in including, under one general name, appearances so contrary and substances so different.

For an account of the first kind, see *Polypus.*

Of the second kind, which has been defined as an *ovum deforme*, as it is the consequence of conception, it might more justly be arranged under the class of monsters; for though it has the appearance of a shapeless mass of flesh, if examined carefully with a knife, various parts of a child may be discovered, lying together in apparent confusion, but in actual regularity. The pedicle also by which it is connected to the uterus, is not of a fleshy texture, like that of the polypus, but has a regular series of vessels like the umbilical cord, and there is likewise a placenta and membranes containing water. The symptoms attending the formation, growth, and expulsion of this apparently confused mass from the uterus, correspond with those of a well-formed child.

With respect to the third sort of mole, an incision into its substance will discover its true nature; for, although the external surface appears at the first view to be organized flesh, the internal part is composed merely of coagulated blood. As substances of this kind, which mostly occur after delivery, would always be expelled by the action of the uterus, there seems to be no reason for a particular inquiry, if popular opinion had not annexed the idea of mischief to them, and attributed their formation or continuance in the uterus to the negligence or misconduct of the practitioner. Hence the persuasion arose of the necessity of extracting all the coagula of blood out of the uterus, immediately after the expulsion of the placenta, or of giving medicines to force them away: but abundant experience hath proved, that the retention of such coagula is not, under any circumstances, productive of danger, and that they are most safely expelled by the action of the uterus, though at very different periods after their formation.

Mo′lle. Indian mastich.

MOLLI′TIES O′SSIUM. (*Mollities*, from *mollis*, soft.) A disease of the bones, wherein they can be bent without fracturing them, in consequence either of the inordinate absorption of the phosphate of lime, from which their natural solidity is derived, or else of this matter not being duly secreted and deposited in their fabric. In rickets, the bones only yield and become distorted by slow degrees; but in the present disease they may be at once bent in any direction. The mollities ossium is rare, and its causes not well understood. All the cases of mollities ossium yet on record have proved fatal, and no means of cure are yet known. On dissection of those who have died, all the bones, except the teeth, have been found unusually soft, so that scarcely any of them could resist the knife, the periosteum has been found thicker than usual, and the bones have been found to contain a great quantity of oily matter and little earth.

MOLLI′TIES U′NGUIUM. A preternatural softness of the nails: it often accompanies chlorosis.

Mollifica′tio. A barbarous term for a palsy of the muscles in any particular part.

Molucce′nse li′gnum. See *Croton tiglium.*

MOLYBDATE. *Molybdas.* A salt formed by the union of the molybdic acid with different bases: thus, *molybdate of antimony*, &c.

MOLYBDE′NA. (From *μολυϐδος*, lead.) *Molybditis.* A metal which exists mineralized by sulphur in the ore called *sulphuret of molybdena.* This ore, which is very scarce, is so similar in several of its properties to plumbago that they were long considered as varieties of the same substance. It is of a light lead-grey colour, its surface is smooth, and feels unctuous, its texture is lamellated, it soils the fingers, and marks paper blueish-black, or silver-grey. It may be cut with a knife. It is generally found in compact masses; seldom in particles, or crystallized. It is met with in Sweden, Spain, Saxony, Siberia, and Iceland. Scheele showed that a peculiar metallic acid might be obtained from it; and later chemists have succeeded in reducing this acid to the metallic state. We are indebted to Mr. Hatchett, for a full and accurate analysis of this ore.

The native *sulphuret of molybdena*, is the only ore hitherto known, which contains this metal.

Properties of molybdena.—Molybdena is either in an agglutinated blackish friable mass, having little metallic brilliancy, or in a black powder. The mass slightly united, shows by a magnifying glass, small round brilliant grains. Its weight is about 8. It is one of the most infusible of the metals. It is capable of combining with a number of metals by fusion. It forms with sulphur an artificial sulphuret of molybdena analogous to its ore. It unites also to phosphorus. The affinity of molybdena for oxygen is very feeble, according to Mr. Hatchett. The alkalis have no action on molybdena in the moist way, but it enters readily into fusion with potash and soda. It is oxidizable by boiling sulphuric acid, and acidifiable by the nitric acid. Muriatic acid does not act upon it. It is capable of existing in not less than four different degrees of oxygenation.

Method of obtaining molybdena.—To obtain molybdena is a task of the utmost difficulty. Few chemists have succeeded in producing this metal, on account of its great infusibility. The method recommended in general is the following:—Molybdic acid is to be formed into a paste with oil, dried at the fire, and then exposed to a violent heat in a crucible lined with charcoal. By this means the oxide becomes decomposed; a black agglutinated substance is obtained, very brittle under the finger, and having a metallic brilliancy. This is the metal called molybdena.

Molybdi′tis. See *Molybdena.*

Moly′bdos. (Οτι μολει εις βαθος, from its gravity.) Lead.

Moly′za. (Dim. of *μωλυ*, moly.) Garlic; whose head, like moly, is not divided into cloves.

Momi′scus. (From μωμος, a blemish.) That part of the teeth which is next the gums, and which is usually covered with a foul tartareous crust.

MOMO′RDICA. (*Momordica*; from *mordeo*, to bite; from its sharp taste.) The name of a genus of plants in the Linnæan system. Class, *Monoecia*. Order, *Syngenesia*. The balsam apple plant.

Momo′rdica elate′rium. The systematic name of the squirting cucumber. *Elaterium. Cucumis agrestis. Cucumis asininus. Cucumis sylvestris. Elaterium officinarum. Boubalios. Guarerba orba.* Wild or squirting cucumber. *Momordica elaterium; pomis hispidis cirrhisnullis*, of Linnæus. The dried sediment from the juice of this plant is the elaterium of the shops. It has neither smell nor taste, and is the most powerful cathartic in the whole materia medica. Its efficacy in dropsies is said to be considerable; it, however, requires great caution in the exhibition. From the eighth to the half of a grain should be given at first, and repeated at proper intervals until it operates.

Mona′rda fistulo′sa. The systematic name of the purple monarda. The leaves of this plant have a fragrant smell, and an aromatic and somewhat bitter taste, possessing nervine, stomachic, and deobstruent virtues. An infusion is recommended in the cure of intermittent fevers.

Mone′lli. A species of *Anagallis*.

Money-wort. See *Lysimachia nummularia*.

Monks rhubarb. See *Rumex alpinus*.

Monkshood. See *Anthora*.

Mono′culum. (From μονος, single, and *oculus*, the eye.) A name given to the cæcum, or blind gut, by Paracelsus, because it is perforated only at one end.

Mono′culus. (From μονος, one, and *oculus*, an eye.) *Monopia*. A very uncommon species of monstrosity, in which there is but one eye, and that mostly above the root of the nose.

Monohe′mera. (From μονος, single, and ημερα, a day.) A disease of one day's continuance.

Mono′machon. The intestinum cæcum.

Monope′gia. (From μονος, single, and ϖηγνυμι, to compress.) A pain in only one side of the head.

Mono′pia. (From μονος, single, and ωψ, the eye.) See *Monoculus*.

Mono′rchis. (From μονος, one, and ορχις, a testicle.) An epithet for a person that has but one testicle.

MONRO, Alexander, was born in London, of Scotch parents, in 1697. His father, who was an army surgeon, settled afterwards at Edinburgh, and took great interest in his education. At a proper age, he sent him to attend Cheselden in London, where he displayed great assiduity, and laid the foundation of his celebrated work on the Bones; he then went to Paris, and in 1718 to Leydon, where he received the particular commendation of Boerhaave. Returning to Edinburgh the following year he was appointed professor and demonstrator of anatomy to the Company of Surgeons, and soon after he began to give public lectures on that subject, Dr. Alston at the same time taking up the Materia Medica and Botany. This may be regarded as the opening of that medical school, which has since extended its fame throughout Europe, and even to America. The two lectureships were placed upon the university establishment in 1720, and others shortly added to complete the system of medical education; but an opportunity of seeing practice being still wanting, Dr. Monro pointed out in a pamphlet the advantages of such an institution; the Royal Infirmary was therefore established, and he commenced Clinical Lectures on Surgery; and Dr. Rutherford, afterwards extended the plan to Medical cases. None of the new professors contributed so much to the celebrity of this school as Dr. Monro, not only by the diligent and skilful execution of the duties of his office, but also by various ingenious and useful publications. He continued his lectures during upwards of six months annually for nearly forty years, and acquired such reputation, that students flocked to him from the most distant parts of the kingdom. His first and chief work was his "Osteology" in 1726, intended for his pupils; but which became very popular, passed through numerous editions, and was translated into most European languages: he afterwards added a concise description of the nerves, and a very accurate account of the lacteal system and thoracic duct. He was also the father and active supporter of a society, to which the public is indebted for six volumes of "Medical Essays and Observations:" he acted as secretary, and had the chief labour in the publication of these, besides having contributed many valuable papers, especially an elaborate Essay on the Nutrition of the Fœtus. The plan of the society was afterwards extended, and three volumes of "Essays Physical and Literary" were published, in which Dr. Monro has several useful papers. His last publication was an Account of the Success of Inoculation in Scotland. He left, however, several works in manuscript; of which a short Treatise on Comparative Anatomy, and his oration "De Cuticula," have been since given to the public. In 1759 Dr. Monro resigned his anatomical chair to his son, but continued his Clinical lectures; he exerted himself also in promoting almost every object of public utility. He was chosen a fellow of the Royal Society of London, and an honorary member of the Royal Academy of Surgery at Paris. He died in 1767.

Mons. A mount, or hill.

MONS VE′NERIS. The triangular

eminence immediately over the os pubis of women, that is covered with hair.

MONSTER. *Lusus naturæ.* Dr. Denman divides monsters into, 1st, Monsters from redundance or multiplicity of parts; 2d, Monsters from deficiency or want of parts; 3d, Monsters from confusion of parts.

To these might perhaps be added, without impropriety, another kind, in which there is neither redundance, nor deficiency, nor confusion of parts, but an error of place, as in transposition of the viscera. But children born with diseases, as the hydrocephalus, or their effects, as in some cases of blindness, from previous inflammation, cannot be properly considered as monsters, though they are often so denominated.

Of the first order there may be two kinds; redundance or multiplicity of natural parts, as of two heads and one body, of one head and two bodies, an increased number of limbs, as legs, arms, fingers, and toes: or excrescences or additions to parts of no certain form, as those upon the head and other parts of the body. It is not surprising that we should be ignorant of the manner in which monsters or irregular births are generated or produced; though it is probable that the laws by which these are governed are as regular, both as to cause and effect, as in common or natural productions. Formerly, and indeed till within these few years, it was a generally received opinion, that monsters were not primordial or aboriginal, but that they were caused subsequently, by the power of the imagination of the mother, transferring the imperfection of some external object, or the mark of something for which she longed, and with which she was not indulged, to the child of which she was pregnant; or by some accident which happened to her during her pregnancy. Such opinions, it is reasonable to think, were permitted to pass current, in order to protect pregnant women from all hazardous and disagreeable occupations, to screen them from severe labour, and to procure for them a greater share of indulgence and tenderness than could be granted to them in the common occurrences of life. The laws and customs of every civilized nation have, in some degree, established a persuasion that there was something sacred in the person of a pregnant woman: and this may be right in several points of view; but these only go a little way towards justifying the opinion of monsters being caused by the imagination of the mother. The opinion has been disproved by common observation, and by philosophy, not perhaps by positive proofs, but by many strong negative facts; as the improbability of any child being born perfect, had such a power existed; the freedom of children from any blemish, their mothers being in situations most exposed to objects likely to produce them; the ignorance of the mother of any thing being wrong in the child, till, from information of the fact, she begins to recollect every accident which happened during her pregnancy, and assigns the worst, or the most plausible, as the cause; the organization and colour of these adventitious substances; the frequent occurrence of monsters in the brute creation, in which the power of the imagination cannot be great; and the analogous appearances in the vegetable system, where it does not exist in any degree. Judging, however, from appearances, accidents may perhaps be allowed to have considerable influence in the production of monsters of some kinds, either by actual injury upon parts, or by suppressing or deranging the principle of growth, because, when an arm, for instance, is wanting, the rudiments of the deficient parts may generally be discovered.

MORBI'LLI. (Dim. of *morbus*, a disease.) See *Rubeola*.

Mo'rbus arqua'tus. The jaundice.

Mo'rbus atto'nitus. The epilepsy, or apoplexy.

Mo'rbus coxa'rius. See *Arthropuosis*.

Mo'rbus ga'llicus. The venereal disease.

Mo'rbus hercu'leus. The epilepsy.

Mo'rbus infanti'lis. The epilepsy.

Mo'rbus I'ndicus. The Indian disease, the venereal disease.

Mo'rbus ma'gnus. The epilepsy.

Mo'rbus ni'ger. The black disease. So Hippocrates named it, and thus described it. This disorder is known by vomiting a concrete blood of a blackish red colour, and mixed with a large quantity of insipid, acid, or viscid phlegm. This evacuation is generally preceded by a pungent tensive pain, in both the hypochondria; and the appearance of the disease is attended with anxiety, a compressive pain in the præcordia, and fainting, which last is more frequent and violent, when the blood which is evacuated is fœtid and corrupt. The stomach and the spleen are the principal, if not the proper seat of this disease.

Mo'rbus re'gius. The jaundice.

Mo'rbus sa'cer. The epilepsy.

Mo'rel. See *Phallus esculentus*.

More'tus. (From *morum*, the mulberry.) A decoction of mulberries.

MORGAGNI, Giambatista, was born at Forli in 1682. He commenced his medical studies at Bologna, and displayed such ardour and talent, that Valsalva availed himself of his assistance in his researches into the organ of hearing, and in drawing up his memoirs on that subject. He also performed the professorial duties during the temporary absence of Valsalva, and by his skill and obliging manners procured general esteem. He afterwards prosecuted his studies at Venice and Padua, and then settled in his native place. He soon however perceived, that this was too contracted a sphere for his abilities; wherefore he returned to Padua, where a vacancy soon occurring, he was nominated in 1711 to teach the theory of physic. He had already distinguished himself by the publication five years before of the first part of his "Adversaria Anatomica," a work remarkable for its accuracy, as well as originality; of which subsequently five other parts appeared. He assisted Lancisi in preparing for publication the valuable drawings of Eustachius, which came out in 1714. The following year he was appointed to the first anatomical professorship in Padua; and from that period ranked at the head of the anatomists of his time. He was also well versed in general literature, and other subjects not immediately connected with his profession: and honours were rapidly accumulated upon him from every quarter of Europe. He was distinguished by the particular esteem of three successive Popes, and by the visits of all the learned and great, who came into his neighbourhood; and his native city placed a bust of him in their public hall during his life, with an honorary inscription. Though he had a large family, he accumulated a considerable property by his industry and economy; and by means of a good constitution and regular habits, he attained the advanced age of 90. Besides the Adversaria he published several other works, two quarto volumes of anatomical epistles, an essay on the proper method of acquiring medical science, which appeared on his appointment to the theoretical chair, &c. But that which has chiefly rendered his name illustrious is entitled "De Sedibus et Causis Morborum," printed at Venice in 1760. It contains a prodigious collection of dissections of morbid bodies, made by Valsalva and himself, arranged according to the organs affected. He followed the plan of Bonetus; but the accuracy of his details renders the collection far superior in value to any, that had preceded it.

Mo′ria. (From μωρος, foolish.) Idiotism. Fatuity.

Mo′ro. (From *morum*, a mulberry.) A small abscess resembling a mulberry.

Moro′sis. (From μωρος, foolish.) See *Amentia.*

Morphe′a a′lba. (From μορφη, form.) A species of cutaneous leprosy. See *Alphus.*

Morse′llus. *Morsulus.* A lozenge.

Mo′rsuli. An ancient name for those forms of medicines which were to be chewed in the mouth, as a lozenge, the word signifying a little mouthful.

Mo′rsus dia′boli. The fimbriæ of the Fallopian tubes.

Mo′rta. See *Pemphigus.*

Mortari′olum. (Dim. of *mortarium*, a mortar.) In chemistry, it is a sort of mould for making cupels with, also a little mortar. In anatomy, it is the sockets of the teeth.

MORTIFICATION. (From *mors*, death, and *fio*, to become.) *Mortificatio. Gangrena. Sphacelus.* The loss of vitality of a part of the body. Surgeons divide mortification into two species, the one preceded by inflammation, the other without it. In inflammations that are to terminate in mortification, there is a diminution of power joined to an increased action; this becomes a cause of mortification, by destroying the balance of power and action, which ought to exist in every part. There are, however, cases of mortification that do not arise wholly from that as a cause: of this kind are the carbuncle, and the slough, formed in the small-pox pustule. Healthy phlegmonous inflammation seldom ends in mortification, though it does so when very vehement and extensive. Erysipelatous inflammation is observed most frequently to terminate in gangrene; and whenever phlegmon is in any degree conjoined with an erysipelatous affection, which it not unfrequently is, it seems thereby to acquire the same tendency, being more difficult to bring to resolution, or suppuration, than the true phlegmon, and more apt to run into a mortified state.

Causes which impede the circulation of the part affected, will occasion mortification, as is exemplified in strangulated hernia, tied polypi, or a limb being deprived of circulation from a dislocated joint.

Preventing the entrance of arterial blood into a limb, is also another cause. Paralysis, conjoined with pressure, old age, and ossification of the arteries, may produce mortification; also cold, particularly if followed by the sudden application of warmth; and likewise excessive heat applied to a part.

The symptoms of mortification that take place after inflammation are various, but generally as follows:—the pain and sympathetic fever suddenly diminish, the part affected becomes soft, and of a livid colour, losing at the same time more or less of its sensibility.

When any part of the body loses all motion, sensibility, and natural heat, and becomes of a brown livid or black colour, it is said to be affected with sphacelus. When the part becomes a cold, black, fibrous, senseless substance, it is termed a slough. As long as any sensibility, motion, and warmth continue, the state of the disorder is said to be gangrene. This last term is synonymous with mortification.

When gangrene takes place, the patient is usually troubled with a kind of hiccough: the constitution always suffers an immediate dejection, the countenance assumes a wild cadaverous look, the pulse becomes small, rapid, and sometimes irregular; cold perspirations come on, and the patient is often affected with diarrhœa and delirium.

MORTON, Richard, was born in Suffolk, and after taking the degree of Bachelor of Arts at Oxford, officiated for some time as a chaplain: but the intolerance of the times, and his own religious scruples, compelled him to change for the medical profession. He was accordingly admitted to his doctor's degree in 1670, having accompanied the Prince of Orange to Oxford, as physician to his person. He afterwards settled in London, became a Fellow of the College, and obtained a large share of city practice. He died in 1698. His works have had considerable reputation, and evince some acuteness of observation, and activity of practice. They abound, however, with the errors of the humoral pathology, which then prevailed; and sanction a method of treatment in acute diseases, which his more able contemporary, Sydenham, discountenanced, and which subsequent experience has generally discarded. His first publication was an attempt to arrange the varieties of consumption, but not very successfully. His "Pyretologia" came out in two volumes, the first in 1691, the other at an interval of three years; in this work especially the stimulant treatment of fevers is carried to an unusual extent, and a more general use of cinchona recommended.

MO'RUM. The mulberry. See *Morus nigra.*

MO'RUS. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Tetrandria.* The mulberry-tree.

Mo'rus ni'gra. The systematic name of the mulberry-tree. *Foliis cordatis scabris,* of Linnæus. Mulberries abound with a deep violet-coloured juice, which, in its general qualities, agrees with that of the fruits called *acido-dulces,* allaying thirst, partly by refrigerating, and partly by exciting an excretion of mucus from the mouth and fauces, a similar effect is also produced in the stomach, where, by correcting putrescency, a powerful cause of thirst is removed. The London College directs a *syrupus mori,* which is an agreeable vehicle for various medicines. The bark of the root of this tree is said, by Andrée, to be useful in cases of tænia.

Moscha'ta nux. See *Myristica moschata.*

MO'SCHUS. (*Mosch,* Arab.) Musk. An unctuous substance, contained in excretory follicles about the navel of the male animal, called *Moschus moschiferus,* by Linnæus (a ruminating quadruped, resembling the antelope,) the strong and permanent smell of which is peculiar to it. It is contained in a bag placed near the umbilical region. The best musk is brought from Tonquin, in China; an inferior sort from Agria and Bengal, and a still worse from Russia.

It is slightly unctuous, of a black colour, having a strong durable smell and a bitter taste. It yields part of its active matter to water, by infusion; by distillation the water is impregnated with its flavour; alcohol dissolves it, its impurities excepted. Chewed, and rubbed with a knife on paper, it looks bright, yellowish, smooth, and free from grittiness. Laid on a red-hot iron, it catches flame and burns almost entirely away, leaving only an exceedingly small quantity of light greyish ashes. If any earthy substances have been mixed with the musk the impurities will discover them. The medicinal and chemical properties of musk and castor are very similar: the virtues of the former are generally believed to be more powerful, and hence musk is preferred in cases of imminent danger. It is prescribed as a powerful antispasmodic, in doses of three grains or upwards, even to half a drachm, in the greater number of spasmodic diseases, especially in hysteria and singultus, and also in diseases of debility. In typhus, it is employed to remove subsultus tendinum; and other symptoms of a spasmodic nature. In cholera it frequently stops vomiting; and, combined with ammonia, it is given to arrest the progress of gangrene. It is best given in the form of bolus. To children it is given in the form of enema, and is an efficacious remedy in the convulsions arising from dentition. It is also given in hydrophobia, and in some forms of mania.

Mo'schus moschi'ferus. The systematic name of the musk animal. See *Moschus.*

Mosqui'ta. (From *mosquita,* a gnat, Span.) An itching eruption of the skin, produced in hot climates by the bite of gnats.

Mosy'llum. (Μοσυλλον.) The best cinnamon.

Mother of thyme. See *Thymus serpyllum.*

Motherwort. See *Leonurus cardiaca.*

Motion, muscular. See *Muscular motion.*

Motion, peristaltic. See *Peristaltic motion.*

MOTO'RES OCULO'RUM. (*Nervi Motores;* so called from their office.) The third pair of nerves of the brain. They arise from the crura cerebri, and are distributed on the muscles of the bulb of the eye.

Moto'rii oculo'rum. See *Motores oculorum.*

Mould. See *Fontanella.*

Mountain parsley, black. See *Athamanta oreoselinum.*

Mouse-ear. See *Hieracium pilosella.*

MOUTH. *Os.* The cavity of the mouth is well known. The parts which constitute it are the common integuments, the lips, the muscles of the upper and under jaw, the palate, two alveolar arches, the gums, the tongue, the cheeks, and salival glands. The bones of the mouth are the two superior maxillary, two palatine, the lower jaw, and thirty-two teeth. The arteries of the external parts of the mouth are branches of the infra-orbital, inferior alveolar, and facial arteries. The veins empty themselves into the the external jugulars. The nerves are branches from the fifth and seventh pair. The use of the mouth is for mastication, speech, respiration, deglutition, suction, and taste.

Mo'xa Japo'nica. (Japonese.) See *Artemisia Chinensis*.

MUCILAGE. *Mucilago*. A solution of gum. See *Gum*.

MUCILAGINOUS EXTRACTS. Extracts that readily dissolve in water, scarcely at all in spirits of wine, and undergo spirituous fermentation.

Mucila'go aca'ciæ. Mucilage of acacia. *Mucilago gummi arabici.* "Take of acacia gum, powdered, four ounces; boiling water, half a pint. Rub the gum with the water, gradually added, until it incorporates into a mucilage." A demulcent preparation, more frequently used to combine medicines, than in any other form.

Mucila'go a'myli. Starch mucilage. "Take of starch, three drachms; water, a pint. Rub the starch, gradually adding the water to it; then boil until it incorporates into a mucilage." This preparation is mostly exhibited with opium, in the form of clyster in diarrhœas and dysenteries, where the tenesmus arises from an abrasion of the mucus of the rectum.

Mucila'go ara'bici gu'mmi. See *Mucilago acaciæ*.

Mucila'go se'minis cydo'nii. See *Decoctum cydoniæ*.

Mucila'go tragaca'nthæ. Mucilage of tragacanth, joined with syrup of mulberries, forms a pleasant demulcent, and may be exhibited to children, who are fond of it. This mucilage is omitted in the last London Pharmacopœia, as possessing no superiority over the mucilage of acacia.

Mucoca'rneus. In M. A. Severinus, it is an epithet for a tumour, and an abscess, which is partly fleshy and partly mucous.

MUCOUS GLANDS. *Glandulæ mucosæ.* Muciparous glands. Glands that secrete mucus, such as the glands of the Schneiderian membrane of the nose, the glands of the fauces, œsophagus, stomach, intestines, bladder, urethra, &c.

MUCUS, ANIMAL. Animal mucus differs from that obtained from the vegetable kingdom, in not being soluble in water, swimming on its surface, nor capable of mixing oil with water, and being soluble in mineral acids, which vegetable mucus is not. The use of this substance is to lubricate and defend the parts upon which it is secreted, as the nose, œsophagus, stomach, intestines, urethra, vagina, &c. Sir Everard Home, in his dissertation on the properties of pus, informs us of a curious and apparently decisive mode of distinguishing between pus and animal mucus. The property, he observes, which characterizes pus, and distinguishes it from most other substances, is, its being composed of globules, which are visible when viewed through a microscope; whereas, animal mucus, and all chemical combinations of animal substances, appear in the microscope to be made up of flakes. This property was first noticed by the late Mr. J. Hunter.

MUCUS, VEGETABLE. See *Gum*.

Mugwort. See *Artemisia vulgaris.*

Mu'læ. Pustules contracted either by heat or cold.

Mulberry. See *Morus.*

Mullein. See *Verbascum.*

Mu'lsum. *Mulsa. Hydromel.* Honey-water; though sometimes it signifies wine sweetened with honey

MULTI'FIDUS SPI'NÆ. (From *multus*, many, and *findo*, to divide.) *Transverso-spinalis lumborum. Musculus sacer. Semi-spinalis internus, sive transverso-spinalis dorsi. Semi-spinalis, sive transverso spinalis colli, pars interna*, of Winslow. *Transversalis lumborum vulgo sacer. Transversalis dorsi. Transversalis colli*, of Douglas. *Lumbo dorsi spinal*, of Dumas. The generality of anatomical writers have unnecessarily multiplied the muscles of the spine, and hence their descriptions of these parts are confused, and difficult to be understood. Under the name of *multifidus spinæ*, Albinus has, therefore, very properly included those portions of muscular flesh, intermixed with tendinous fibres, which lie close to the posterior part of the spine, and which Douglas and Winslow have described as three distinct muscles, under the names of *transversales*, or *transverso-spinales*, of the loins, back, and neck. The multifidus spinæ arises tendinous and fleshy from the upper convex surface of the os sacrum, from the posterior adjoining part of the ilium, from the oblique and transverse processes of all the lumbar vertebræ, from the transverse processes of all the dorsal vertebræ, and from those of the cervical vertebræ, excepting the three first. From all these origins the fibres of the muscles run in an oblique direction, and are inserted, by distinct tendons, into the spinous processes of all the vertebræ of the loins and back, and likewise into those of the six inferior vertebræ of the neck. When this muscle acts singly, it extends the back obliquely, or moves it to one side; when both muscles act, they extend the vertebræ backwards.

Multifo'rme os. See *Ethmoid bone.*

Mu'ltipes. (From *multus*, many, and *pes*, a foot. 1. The wood-louse. 2. The polypus. 3. Any animal having more than four feet.

Mumps. See *Cynanche.*

Mundicati'va. (From *mundo*, to cleanse.) *Mundificantia.* Medicines which purify and clean away foulness.

Mundifica'ntia. See *Mundicativa.*

Mu'ngos. See *Ophiorrhiza mungos.*

Mura'lis. (From *murus*, a wall; so called because it grows upon walls.) Pellitory. See *Parietaria*.

Mura'ria. (From *murus*, a wall; because it grows about walls.) A species of maiden hair.

MU'RIAS. A muriate, or salt, formed by the union of the muriatic acid with certain bases, as *muriate of ammonia*, &c.

MU'RIAS AMMO'NIÆ. See *Sal ammoniac*.

Mu'rias antimo'nii. Butter of antimony. Formerly used as a caustic.

Mu'rias bary'tæ. See *Barytes*.

Mu'rias calcis. See *Calx*.

MU'RIAS FE'RRI. *Ferrum salitum. Oleum martis per deliquium.* This preparation of iron is styptic and tonic, and may be given in chlorosis, intermittents, rachitis, &c.

Mu'rias fe'rri ammoniaca'lis. See *Ferrum ammoniatum*.

Mu'rias hydra'rgyri. There are two muriates of mercury. See *Hydrargyri submurias*, and *Hydrargyri oxymurias*.

Mu'rias hydra'rgyri ammoniaca'lis. See *Hydrargyrum præcipitatum album*.

Mu'rias hydra'rgyri oxygena'tus. See *Hydrargyri oxymurias*.

MU'RIAS HYPEROXYGENA'TUS POTA'SSÆ. The oxygenated muriate of potash has lately been extolled in the cure of the venereal disease. It is exhibited in doses of from fifteen to forty grains in the course of a day. It increases the action of the heart and arteries, is supposed to oxygenate the blood, and prove of great service in scorbutus, asthenia, and cachectic diseases.

MU'RIAS POTA'SSÆ. *Alkali vegetabile salitum. Sal digestivus. Sal febrifugus Sylvii.* This salt is exhibited with the same intention as the muriate of soda, and was formerly in high estimation in the cure of intermittents, &c.

Mu'rias so'dæ. See *Sodæ murias*.

Mu'rias sti'bii. See *Murias antimonii.*

MURIATIC ACID GAS. The basis of this gas is still unknown. The presence of oxygen has not been demonstrated in it and it is only by analogy that we may venture to suppose it instrumental in this acid gas.

Properties.—It has a very pungent and suffocating odour, which excites coughing. It is readily absorbed by water, by ardent spirit, ether, fat, and essential oils, melted wax, phosphorus, and many other bodies. It is a true acid. It suffocates animals, and is so very caustic as to excoriate the skin. It extinguishes a lighted taper, the flame of which previously becomes green, or rather light blue at the upper part of its disk. Light has no effect upon it. Caloric rarifies it. It is heavier than common air. The specific gravity of the former is to that of the latter as 1.284 to 1.000. When brought into contact with atmospheric air, or oxygen gas, it forms a white cloud, from condensing the vapour in them. Ice is melted by it as speedily as if thrown into the fire. It unites to alkaline and terrene substances, and forms with them new compounds: but it has no action on siliceous earths. If ammoniacal gas be mixed with it, both gases lose their gaseous form in a moment, and are transformed to a concrete salt. Carbonic acid gas, nitrogen gas, gaseous oxide of nitrogen, sulphuretted hydrogen gas, and carburetted hydrogen gas have no action upon it. It has never been found in a disengaged state in nature. When electric explosions are made to pass through it, its bulk is diminished and hydrogen gas is evolved. These changes are owing to a quantity of water contained in the gas, and cease when it is deprived of moisture, as has been proved by Dr. Henry.

Method of obtaining Muriatic Acid Gas.—1. By decomposing muriate of soda, by means of sulphuric acid. For this purpose, put into a tubulated retort two parts of very dry muriate of soda, and pour on it gradually one part of concentrated sulphuric acid. A violent action takes place, and muriatic acid gas becomes liberated, which must be collected over mercury in the usual manner. The sulphuric acid has a greater affinity for the soda than the muriatic acid has, it therefore unites to it and forms sulphate of soda. The muriatic acid being liberated, takes the gaseous form, and appears as muriatic acid gas, and as the decomposition takes place very rapidly, it is not necessary to apply heat, until the disengagement of the gas begins to slacken, after which the further extrication may be assisted by the heat of a lamp.

2. Muriatic acid gas may likewise be obtained by expelling it from its combination with water.

For this purpose put concentrated muriatic acid into a retort, immerse the beak of it under a receiver placed in a mercurial pneumatic trough, and filled with that metal. On exposing the acid to a gentle heat, muriatic acid gas will be obtained. If the process be very carefully managed, nothing but water remains in the retort.

3. Muriatic acid gas is likewise produced by putting any quantity of liquid muriatic acid into a long glass tube, and adding to it about one-third or one-fourth by measure of concentrated sulphuric acid. A violent effervescence takes place, and the whole tube becomes filled with dense white vapours, which are muriatic acid gas, condensed again by means of the moisture of the atmosphere. The sulphuric acid, added to the muriatic acid, deprives the latter of part of its water, a combination and penetration of the two liquids take place, and caloric is evolved, contributing to render the gas aëriform, which is thus forced to escape.

This experiment proves that the affinity of sulphuric acid for water, is greater than that of muriatic acid.

Water impregnated with this gas forms

MURIATIC ACID.

Properties.—Liquid muriatic acid, or water impregnated with muriatic acid gas, is a colourless, very odorous, and pungent fluid. It emits copious white fumes in contact with moist atmospheric air; these fumes are muriatic acid gas that escapes from it, and condenses again by combining with the humidity of the air. If a wide-mouthed bottle, containing strong muriatic acid, be opened, and the hand brought near its orifice, a sensible warmth is perceived, which arises from the combination of the acid gas with the water of the atmosphere. Liquid muriatic acid is unalterable by any known combustible body. It disengages the carbonic, phosphoric, and sulphurous acids from all their combinations, but it is generally expelled by the action of the sulphuric acid.

Method of obtaining Muriatic Acid.—Muriatic acid is best obtained by decomposing muriate of soda, or common salt, by means of sulphuric acid, in the following manner:

Put into a tubulated retort (lodged in a sand-heat, or supported over a lamp, and connected with Pepys' distillatory vessel, or Woulf's bottles, every one containing a small quantity of distilled water,) three parts of muriate of soda, and pour on it one of sulphuric acid very gradually, or rather let it be suffered to drop into the retort, by means of a funnel fastened to its tubulure, and whose inner opening may at pleasure be closed, wholly, or in part, by means of a ground-glass rod. Muriatic acid gas will be plentifully disengaged, which passes through the neck of the retort, and becomes absorbed by the water, which is heated thereby. When the water in the first bottle is fully saturated, it absorbs no more, and becomes cold, but the gas continues to pass into the next bottles, and heats the water they contain. The water, thus impregnated with muriatic acid gas, is muriatic acid.

Remark.—If sulphuric acid, diluted with an equal quantity, by weight, of water, be made use of in this process, the apparatus of Pepys or Woulf may be dispensed with, and a common receiver may be used with safety.

The salts formed by the combination of muriatic acid with different bases, are called MURIATES.

This acid possesses active tonic powers. In typhus, or nervous fevers, although employed on the Continent with success, it has not proved so beneficial in this country; and when freely used, it is apt to determine to the bowels. Externally, the muriatic acid has been applied in the form of a bath, to the feet, in gout. In a late publication, there are accounts of its successful application as a lithontriptic.

Muriatic acid, oxygenated. See *Oxymuriatic acid.*

MURRAY, JOHN ANDREW, was born at Stockholm, of a Scotch family, in 1740. At 16 he was sent to Upsal, and had the benefit of the instructions of Linnæus, for whom he ever after entertained the highest esteem. In 1759 he took a journey through the southern provinces of Sweden, and thence to Copenhagen; and in the following year he went to Gottingen, where his brother was professor of philosophy. In 1763 he took his degree of doctor in medicine, and by a special licence from the Hanoverian government, gave lectures in botany: and in the following spring he was appointed extraordinary professor of medicine in that university. From this period his reputation rapidly extended; he was elected a member in the course of a few years of most of the learned societies in Europe. In 1769 he succeeded to the actual professorship of medicine, and was made doctor of the botanic garden. He was still farther honoured by receiving the title of the Order of Vasa from the King of Sweden in 1780: and two years afterwards by being raised to the rank of privy counsellor by his Britannic Majesty. In 1791 he was attacked with a spurious peripneumony, which shortly terminated his existence. He was a man of sound judgment, great activity, and extensive information. He composed a great number of tracts on various subjects in botany, natural history, medicine, pharmacy, and medical literature. His principal work, which occupied a large portion of his time and attention, was on the Materia Medica, under the title of "Apparatus Medicaminum," in six octavo volumes: indeed he was employed in correcting the last for the press the day before his death. In the Transactions of the Royal Society of Gottingen there are many valuable papers by him, chiefly botanical; and his descriptions are deemed models of elegance and accuracy.

MUSADI. Sal ammoniac.

MU'SA PARADISI'ACA. *Musa. Palma humilis. Ficus Indica. Bala. Platanus.* The plantain-tree. It grows spontaneously in many parts of India, but has been immemorially cultivated by the Indians in every part of the continent of South America. It is an herbaceous tree, growing to the height of fifteen or twenty feet. The fruit are nearly of the size and shape of ordinary cucumbers, and, when ripe, of a pale yellow colour, of a mealy substance, a little clammy, with a sweetish taste, and will dissolve in the mouth without chewing. The whole spike of fruit often weighs forty or fifty pounds. When they are brought to table by way of desert, they are either raw, fried, or roasted; but, if intended for bread, they are cut before they are ripe, and are then either roasted or boiled. The trees being tall and slender, the Indians cut them down to get at the fruit; and in doing this they suffer no loss, for the stems are only one year's growth, and would die if not cut; but the roots continue, and new stems soon spring up, which in a year produce ripe fruit also. From the ripe plantains they make a liquor called *mistaw*. When they make this, they roast the fruit in their husks, and, after totally beating them to a mash, they pour water upon them, and, as the liquor is wanted, it is drawn off. But the nature of this fruit is such, that they will not keep long without running into a state of putrefaction; and thefore, in order to reap the advantage of them at all times, they make cakes of the pulp, and dry them over a slow fire, and, as they stand in need of mistaw, they mash the cakes in water, and they answer all the purposes of fresh fruit. These cakes are exceedingly convenient to make this liquor in their journeys, and they never fail to carry them for that purpose. The leaves of the tree being large and spacious, serve the Indians for table-cloths and napkins.

Mu'sa sapie'ntum. The systematic name of the banana-tree. See *Banana*.

Musci'pula. (From *mus*, a mouse, and *capio*, to take, being originally applied to a mouse trap; afterwards to a plant, so called from its viscidity, by which flies are caught, as with bird-lime.) A species of lychnis.

MUSCLE. *Musculus*. The parts that are usually included under this name consist of distinct portions of flesh, susceptible of contraction and relaxation; the motions of which, in a natural and healthy state, are subject to the will, and for this reason they are called *voluntary* muscles. Besides these, there are other parts of the body that owe their power of contraction to their muscular fibres: thus the heart is a muscular texture, forming what is called a hollow muscle; and the urinary bladder, stomach, intestines, &c. are enabled to act upon their contents, merely because they are provided with muscular fibres; these are called *involuntary* muscles, because their motions are not dependent on the will. The muscles of respiration being in some measure influenced by the will, are said to have a *mixed* motion. The names by which the voluntary muscles are distinguished are founded on their size, figure, situation, use, or the arrangement of their fibres, or their origin and insertion; but, besides these particular distinctions, there are certain general ones that require to be noticed. Thus, if the fibres of a muscle are placed parallel to each other, in a straight direction, they form what anatomists term a *rectilinear* muscle; if the fibres cross and intersect each other, they constitute a *compound* muscle; when the fibres are disposed in the manner of rays, a *radiated* muscle; when they are placed obliquely with respect to the tendon, like the plume of a pen, a *penniform* muscle. Muscles that act in opposition to each other are called *antagonists*; thus every extensor has a flexor for its antagonist, and *vice versâ*. Muscles that concur in the same action are termed *congeneres*. The muscles being attached to the bones, the latter may be considered as levers, that are moved in different directions by the contraction of those organs. That end of the muscle which adheres to the most fixed part is usually called the *origin*; and that which adheres to the more moveable part the *insertion* of the muscle. In almost every muscle two kinds of fibres are distinguished; the one soft, of a red colour, sensible, and irritable, called *fleshy* fibres, see *Muscular Fibre*; the other of a firmer texture, of a white glistening colour, insensible, without irritability or the power of contracting, and named *tendinous* fibres. They are occasionally intermixed, but the fleshy fibres generally prevail in the belly, or middle part of the muscle, and the tendinous ones in the extremities. If these tendinous fibres are formed into a round slender cord, they form what is called the *tendon* of the muscle; on the other hand, if they are spread into a broad flat surface, it is termed an *aponeurosis*.

Each muscle is surrounded by a very thin and delicate covering of cellular membrane, which encloses it as it were like a sheath, and, dipping down into its substance, surrounds the most minute fibres we are able to trace, connecting them to each other, lubricating them by means of the fat which its cells contain in more or less quantity in different subjects, and serving as a support to the blood-vessels, lymphatics, and nerves which are so plentifully distributed through the muscles.— This cellular membrane, which in no respect differs from what is found investing and connecting the other parts of the body, has been sometimes mistaken for a membrane, peculiar to the muscles; and hence we often find writers giving it the name of *membrana propria musculosa*. The muscles owe the red colour which so particularly distinguishes their belly part, to an infinite number of arteries, which are every where dispersed through the whole of their reticular substance; for their fibres, after having been macerated in water, are (like all other parts of the body divested of their blood) found to be of a white colour. These arteries usually enter the muscles by several considerable branches, and ramify so minutely through their substance, that we are unable, even with the best microscopes, to trace their ultimate branches. Ruysch fancied that the muscular fibre was hollow, and a production of a capillary artery; but this was merely conjectural. The veins, for the most part, accompany the arteries, but are found to be larger and more numerous. The lymphatics, likewise, are numerous, as might be expected from the great proportion of reticular substance, which is every where found investing the muscular fibres. The nerves are distributed in such abundance to every muscle, that the muscles of the thumb alone are supplied with a greater proportion of nervous influence than the largest viscera, as the liver for instance. They enter the generality of muscles by several trunks, the branches of which, like those of the blood-vessels, are so minutely dispersed through the cellular substance, that their number and minuteness soon elude the eye, and the knife of the anatomist. This has given rise to a conjecture, as groundless as all the other conjectures on this subject, that the muscular fibre is ultimately nervous.

A Table of the Muscles.

The generality of anatomical writers have arranged muscles according to their several uses; but this method is evidently defective, as the same muscle may very often have different and opposite uses. The method here adopted is that more usually followed at present; they are enumerated in the order in which they are situated, beginning with those that are placed nearest the integuments, and proceeding from these to the muscles that are more deeply seated.

[The reader will be pleased to observe, that all the muscles are in pairs, except those marked thus*].

Muscles of the integuments of the cranium:

Occipito frontalis. Corrugator supercilii.*

Muscles of the eye-lids:

Orbicularis palpebrarum. Levator palpebræ superioris.

Muscles of the eye-ball:

Rectus superior. Rectus inferior. Rectus internus. Rectus externus. Obliquus superior. Obliquus inferior.

Muscles of the nose and mouth:

Levator palpebræ superioris alæque nasi. Levator labii superioris proprius. Levator anguli oris. Zygomaticus major. Zygomaticus minor. Buccinator. Depressor anguli oris. Depressor labii inferioris. Orbicularis oris. Depressor labii superioris alæque nasi. Constrictor nasi. Levator menti vel labii inferioris.*

Muscles of the external ear:

Superior auris. Anterior auris. Posterior auris. Helicis major. Helicis minor. Tragicus. Antitragicus. Transversus auris.

Muscles of the internal ear:

Laxator tympani. Membrana tympani. Tensor tympani. Stapedius.

Muscles of the lower jaw:

Temporalis. Masseter. Pterygoideus externus. Pterygoideus internus.

Muscles about the anterior part of the neck:

Platysma myoides. Sterno-cleidomastoideus.

Muscles between the lower jaw and os hyoides:

Digastricus. Mylo-hyoideus. Genio-hyoideus. Genio-glossus. Hyo-glossus. Lingualis.

Muscles situated between the os hyoides and trunk:

Sterno-hyoideus. Crico-hyoideus. Sterno-thyroideus. Thyro-hyoideus. Crico thyroideus.

Muscles between the lower jaw and os hyoides laterally:

Stylo-glossus. Stylo-hyoideus. Stylo-pharyngeus. Circumflexus. Levator palati mollis.

Muscles about the entry of the fauces:

*Constrictor isthmi faucium. Palatopharyngeus. Azygos uvulæ.**

Muscles situated on the posterior part of the pharynx:

Constrictor pharyngis superior. Constrictor pharyngis medius. Constrictor pharyngis inferior.

Muscles situated about the glottis:

Crico-arytænoideus posticus. Crica arytænoideus lateralis. Thyro-arytænoideus. Arytænoideus obliquus. Arytænoideus transversus.* Thyro-epiglottideus. Arytæno-epiglottideus.*

Muscles situated about the anterior part of the abdomen:

Obliquus descendens externus. Obliquus ascendens internus. Transversalis abdominis. Rectus abdominis. Pyramidalis.

Muscles about the male organs of generation:

Dartos. Cremaster. Erector penis. Accelerator urinæ. Transversus perinei.*

Muscles of the anus:

Sphincter ani. Levator ani.**

Muscles of the female organs of generation:

*Erector clitoridis. Sphincter vaginæ.**

Muscles situated within the pelvis:

Obturator internus. Coccygeus.

Muscles situated within the cavity of the abdomen:

Diaphragma. Quadratus lumborum. Psoas parvus. Psoas magnus. Iliacus internus.*

Muscles situated on the anterior part of the thorax:

Pectoralis major. Subclavius. Pectoralis minor. Serratus major anticus.

Muscles situated between the ribs, and within the thorax:

Intercostales externi. Intercostales interni. Triangularis.

Muscles situated on the anterior part of the neck, close to be the vertebræ:

Longus colli. Rectus internus capitis major. Rectus capitis internus minor. Rectus capitis lateralis.

Muscles situated on the posterior part of the trunk:

Trapezius. Latissimus dorsi. Serratus posticus inferior. Rhomboideus. Splenius.

Serratus superior posticus. Spinalis dorsi. Levatores costarum. Sacro-lumbalis. Longissimus dorsi. Complexus. Trachelo-mastoideus. Levator scapulæ. Semi-spinalis dorsi. Multifidus spinæ. Semi-spinalis colli. Transversalis colli. Rectus capitis posticus minor. Obliquus capitis superior. Obliquus capitis inferior. Scalenus. Interspinales. Intertransversales.

Muscles of the superior extremities:

Supra-spinatus. Infra spinatus. Teres minor. Teres major. Deltoides. Coraco-brachialis. Subscapularis.

Muscles situated on the os humeri:

Biceps flexor cubiti. Brachialis internus. Biceps extensor cubiti. Anconeus.

Muscles situated on the fore-arm:

Supinator radii longus. Extensor carpi radialis longior. Extensor carpi radialis brevior. Extensor digitorum communis. Extensor minimi digiti. Extensor carpi ulnaris. Flexor carpi ulnaris. Palmaris longus. Flexor carpi radialis. Pronator radii teres. Supinator radii brevis. Extensor ossis metacarpi pollicis manus. Extensor primi internodii. Extensor secundi internodii. Indicator. Flexor digitorum sublimis. Flexor digitorum profundus. Flexor longus pollicis. Pronator radii quadratus.

Muscles situated chiefly on the hand:

Lumbricales. Flexor brevis pollicis manus. Opponens pollicis. Abductor pollicis manus. Adductor pollicis manus. Abductor indicis manus. Palmaris brevis. Abductor minimi digiti manus. Adductor minimi digiti. Flexor parvus minimi digiti. Interossei interni. Interossei externi.

Muscles of the inferior extremities:

Pectinalis. Triceps adductor femoris. Obturator externus. Gluteus maximus. Gluteus minimus. Gluteus medius. Pyriformis. Gemini. Quadratus femoris.

Muscles situated on the thigh:

Tensor vaginæ femoris. Sartorius. Rectus femoris. Vastus externus. Vastus internus. Cruralis. Semi-tendinosus. Semi-membranosus. Biceps flexor cruris. Popliteus.

Muscles situated on the leg:

Gastrocnemius externus. Gastrocnemius internus. Plantaris. Tibialis anticus. Tibialis posticus. Peroneus longus. Peroneus brevis. Extensor longus digitorum pedis. Extensor proprius pollicis pedis. Flexor longus digitorum pedis. Flexor longus pollicis pedis.

Muscles chiefly situated on the foot.

Extensor brevis digitorum pedis. Flexor brevis digitorum pedis. Lumbricales pedis. Flexor brevis pollicis pedis. Abductor pollicis pedis. Adductor pollicis pedis. Abductor minimi digiti pedis. Flexor brevis minimi digiti pedis. Transversales pedis. Interossei pedis externi. Interossei pedis interni.

MUSCULAR FIBRE. The fibres that compose the body of a muscle are disposed in fasciculi, or bundles, which are easily distinguishable by the naked eye; but these fasciculi are divisible into still smaller ones; and these again are probably subdivisible *ad infinitum.* The most minute fibre we are able to trace, seems to be somewhat plaited; these plaits disappearing when the fibre is put upon the stretch, seem evidently to be the effect of contraction, and have probably induced some writers to assert, that the muscular fibre is twisted or spiral. Various have been the opinions concerning the structure of these fibres; they are all of them founded only on conjecture, and therefore we shall mention only the principal ones, and this with a view rather to gratify the curiosity of the reader, than to afford him information. Borelli supposes them to be so many hollow cylinders, filled with a spongy medullary substance, which he compares to the pith of elder, *spongiosa ad instar sambuci.* These cylinders, he contends, are intersected by circular fibres, which form a chain of very minute bladders. This hypothesis has since been adopted by a great number of writers, with certain variations. Thus, for instance, Bellini supposes the vesicles to be of a rhomboidal shape; whereas Bernouilli contends that they are oval. Cowper went so far as to persuade himself that he had filled these cells with mercury; a mistake, no doubt, which arose from its insinuating itself into some of the lymphatics. It is observable, however, that Leeuwenhoeck says nothing of any such vesicles. Here, as well as in many other of her works, Nature seems to have drawn a boundary to our inquiries, beyond which no human penetration will probably ever extend. It is surely more commendable, however, to acknowledge our ignorance, than to indulge ourselves in chimæras.

MUSCULAR MOTION. Muscular motions are of three kinds; namely, voluntary, involuntary, and mixed. The *voluntary motions* of muscles are such as proceed from an immediate exertion of the active powers of the will: thus, the mind directs the arm to be raised or depressed, the knee to be bent, the tongue to move, &c. The *involuntary motions* of muscles are those which are performed by organs, seemingly of their own accord, without any attention of the mind, or consciousness of its active power: as the contraction and dilatation of the heart, arteries, veins, absorbents, stomach, intestines, &c. The *mixed motions* are those which are in part under the controul of the will, but which ordinarily act without our being conscious of their acting; as is perceived in the muscles of respiration, the intercostals, the abdominal muscles, and the diaphragm.

When a muscle acts, it becomes shorter and thicker; both its origin and insertion are drawn towards its middle. The sphincter muscles are always in action: and so likewise are antagonist muscles, even when they seem at rest. When two antagonist muscles move with equal force, the part which they are designed to move remains at rest; but if one of the antagonist muscles remains at rest, while the other acts, the part is moved towards the centre of motion.

All the muscles of living animals are constantly endeavouring to shorten themselves.

When a muscle is divided it contracts. If a muscle be stretched to a certain extent, it contracts, and endeavours to acquire its former dimensions, as soon as the stretching cause is removed: this takes place in the dead body; in muscles cut out of the body, and also in parts not muscular, and is called by the immortal Haller *vis mortua*, and by some *vis elastica*. It is greater in living than in dead bodies, and is called the *tone* of the muscles.

When a muscle is wounded, or otherwise irritated, it contracts independent of the will: this power is called *irritability*, and by Haller *vis insita*; it is a property peculiar to, and inherent in the muscles. The parts of our body which possess this property are called irritable, as the heart, arteries, muscles, &c. to distinguish them from those parts which have no muscular fibres. With regard to the degree of this property peculiar to various parts, the heart is the most irritable, then the stomach and intestines; the diaphragm, the arteries, veins, absorbents, and at length the various muscles follow; but the degree of irritability depends upon the age, sex, temperament, mode of living, climate, state of health, idiosyncrasy, and likewise upon the nature of the stimulus.

When a muscle is stimulated, either through the medium of the will or any foreign body, it contracts, and its contraction is greater or less in proportion as the stimulus applied is greater or less. The contraction of muscles is different according to the purpose to be served by their contraction: thus, the heart contracts with a jerk; the urinary bladder, slowly and uniformly; puncture a muscle, and its fibres vibrate; and the abdominal muscles act slowly in expelling the contents of the rectum. Relaxation generally succeeds the contraction of muscles, and alternates with it.

The use of this property is very considerable; for upon it depends all muscular motion, and the function of every viscus except that of the nerves.

Muscular Power. See *Irritability.*

MU'SCULUS, (a diminutive of *mus*, a mouse, from its resemblance to a flay'd mouse.) See *Muscle.*

Mu'sculus cuta'neus. See *Platysma myoides.*

Mu'sculus fa'sciæ la'tæ. See *Tensor vaginæ femoris.*

Mu'sculus patie'ntiæ. See *Levator scapulæ.*

Mu'sculus stape'dius. See *Stapedius.*

Mu'sculus superci'lii. See *Corrugator supercilii.*

Mu'sculus tu'bæ no'væ. See *Circumflexus.*

MU'SCUS. (From μοσχος, tender, so called from its delicate and tender consistence.) Moss.

Mu'scus arbo'reus. See *Lichen plicatus.*

Mu'scus cani'nus. See *Lichen caninus.*

Mu'scus clava'tus. See *Lycopodium.*

Mu'scus cra'nii huma'ni. See *Lichen saxatilis.*

Mu'scus cuma'tilis. This cryptogamous plant, *Lichen apthosus*, is said to act powerfully on the intestines, though never used in the practice of the present day.

Mu'scus ere'ctus. Upright club moss. The pharmacopœial name of the *Lycopodium selago*, of Linnæus, which see.

Mu'scus isla'ndicus. See *Lichen islandicus.*

Mu'scus mari'timus. See *Corallina.*

Mu'scus pulmona'rius que'rcinus. See *Lichen Pulmonarius.*

Mu'scus pyxida'tus. Cup-moss. See *Lichen pyxidatus.*

Mu'scus squamo'sus terre'stris. See *Lycopodium.*

MUSGRAVE, William, was born in Somersetshire, 1657. He went to Oxford with the intention of studying the law; but he afterwards adopted the medical profession, and became a Fellow of the Royal Society, of which body he was appointed secretary in 1684. In this capacity he edited the Philosophical Transactions for some time; he likewise communicated several papers on anatomical and physiological subjects. In 1689 he took his doctor's degree, and became a fellow of the College of Physicians. Not long after this he settled at Exeter, where he practised his profession with considerable success, for nearly 30 years, and died in 1721. Beyond the circle of his practice he made himself known principally by his two treatises on gout, which are valuable works, and were several times reprinted. He was also a distinguished antiquary, and author of several learned tracts on the subjects of his researches in this way.

Mu'sia pa'ttræ. A name for moxa.

Mushroom. See *Agaricus.*

Musk. See *Moschus.*

Musk-cranesbill. See *Geranium moschatum.*

Musk-melon. See *Cucumis melo.*

Musk-seed. See *Hibiscus abelmoschus.*

Musquitto. A species of gnat in the West Indies, which produce small tumours on whatever part they settle, attended with so high a degree of itching and inflammation, that the person cannot refrain from scratching, by a frequent repetition of which he not uncommonly occasions them to ulcerate, particularly if he is of a robust and full habit.

Mustard, black. See *Sinapis.*

Mustard, hedge. See *Erysimum.*

Mustard, treacle. See *Thlaspi.*

Mustard, mithridate. See *Thlaspi.*

Mustard, yellow. See *Sinapis.*

MU'TITAS. (From *mutus*, dumb.) Dumbness. A genus of disease in the class *locales*, and order *dyscinesiæ* of Cullen, which he defines an inability of articulation. He distinguishes three species, viz.

1. *Mutitas organica*, when the tongue is removed or injured.

2. *Mutitas atonica*, arising from an affection of the nerves of the organ.

3. *Mutitas surdorum*, depending upon being born deaf, or becoming so in their infantile years.

MUYS, Wyer-William, was born at Steenwyk in 1682. His father being a physician, he was led to follow the same profession, and at 16 commenced his studies at Leyden, whence he went to Utrecht, and took his degree of doctor in 1701. He settled at first in his native town, and afterwards removed to Arnheim, where he practised with reputation. In 1709 he was elected to the mathematical chair at Franeker, where he subsequently filled also those of medicine, chemistry and botany. The House of Orange afterwards retained him as consulting physician, with a considerable salary, which he received to the end of his life in 1744. He had been five times rector of the university of Franeker, and was a member of the Royal Academy of Sciences of Berlin. His writings were partly medical, partly philosophical. Of the former kind was a dissertation, highly commending the use of sal-ammoniac in intermittents: also a very elaborate investigation of the structure of muscles, comprehending an account of all that had been previously discovered on the subject.

Mu'za. See *Musa.*

Myaca'ntha. (From μυς, a mouse, and ακανθα, a thorn, so called because its prickly leaves are used to cover whatever is intended to be preserved from mice.) See *Ruscus.*

Mya'gro. See *Myagrum.*

Mya'grum. (From μυια, a fly, and αγρευω, to seize, because flies are caught by its viscidity.) A species of wild mustard.

My'ce. (From μυω, to wink, shut up, or obstruct.) 1. It is a winking, closing, or obstruction. It is applied to the eyes, to ulcers, and to the viscera, especially the spleen, where it imports obstructions. 2. In surgery, it is a fungus, such as arises in ulcers and wounds. 3. Some writers speak of a yellow vitriol, which is called *Myce.*

Mychthi'smos, (From μυζω, to mutter, or groan.) In Hippocrates, it is a sort of sighing, or groaning during respiration, whilst the air is forced out of the lungs.

Mycono'ides. (From μυκη, a noise, and ειδος, a likeness.) Applied to an ulcer full of mucus, and which upon pressure emits a wheezing sound.

My'cter. The nose.

Mycte'res. Μυκτηρες. The nostrils.

Myde'sis. (From μυδαω, to abound with moisture.) It imports, in general, a corruption of any part from a redundant moisture. But Galen applies it particularly to the eye-lids.

My'don. (From μυδαω, to grow putrid.) Fungus or putrid flesh in a fistulous ulcer.

MYDRI'ASIS. (From μυδαω, to abound in moisture; so named because it was thought to originate in redundant moisture.) A disease of the iris. Too great a dilatation of the pupil of the eye, with or without a defect of vision. It is known by the pupil always appearing of the same latitude or size in the light. The species of mydriasis are, 1. *Mydriasis amaurotica*, which, for the most part, but not always, accompanies an amaurosis. 2. *Mydriasis hydrocephalica*, which owes its origin to an hydrocephalus internus, or dropsy of the ventricles of the cerebrum. It is not uncommon amongst children, and is the most certain diagnostic of the disease. 3. *Mydriasis verminosa*, or a dilatation of the pupil from saburra and worms in the stomach or small intestines. 4. *Mydriasis a synechia*, or a dilatation of the pupil, with a concretion of the uvea with the capsula of the crystalline lens. 5. *Mydriasis paralytica*, or a dilated pupil, from a paralysis of the orbicular fibres of the iris: it is observed in paralytic disorders, and from the application of narcotics to the eye. 6. *Mydriasis spasmodica*, from a spasm of the rectilineal fibres of the iris, as often happens in hysteric and spasmodic diseases. 7. *Mydriasis*, from atony of the iris, the most frequent cause of which is a large cataract distending the pupil in its passing when extracted. It vanishes in a few days after the operation, in general; however, it may remain so from over and long-continued distension.

Myla'cris. (From μυλη, a grind-stone, so called from its shape.) The patella, or knee pan.

My'le. Μυλη. The knee-pan, or a mole in the uterus.

My'lon. See *Staphyloma.*

MY'LO. Names compounded with this word belong to muscles, which are attached near the grinders; from μυλη, a grinder-tooth: such as,

Mylo-glossi. Small muscles of the tongue.

MYLO-HYOIDE'US. *Mylo-hyoidien*, of Dumas. This muscle, which was first described by Fallopius, is so called from its origin near the *dentes molares*, and its insertion into the os hyoides. It is a thin, flat muscle, situated between the lower jaw and the os hyoides, and is covered by the anterior portion of the digastricus. It arises fleshy, and a little tendinous, from all the inner surface of the lower jaw, as far back as the insertion of the pterygoideus internus, or, in other words, from between the last dens molaris and the middle of the chin, where it joins its fellow, to form one belly, with an intermediate tendinous streak, or *linea alba,* which extends from the chin to the os hyoides, where both muscles are inserted into the lower edge of the basis of that bone. This has induced Riolanus, Winslow, Albinus, and others, to consider it as a single penniform muscle. Its use is to pull the os hyoides upwards, forwards, and to either side.

Mylo-pharynge'us. (*Musculus mylo-pharyngeus,* μυλοφαρυγγαιος; from μυλη, the grinding-tooth, and φαρυγξ, the pharynx.) See *Constrictor pharyngis superior.*

Myoce'phalum. (From μυια, a fly, and κεφαλη, a head, from its resemblance to the head of a fly.) A tumour in the uvea of the eye.

Myocoili'tis. (From μυς, a muscle, and κοιλια, a belly.) So Vogel names inflammation of the muscles of the belly.

Myodesopsia. (From μυια, a fly, ειδος, resemblance, and οψις, vision.) A disease of the eyes, in which the person sees black spots, an appearance of flies, cobwebs, or black wool, before his eyes.

MYOLOGY. (*Myologia,* from μυς, a muscle, and λογος, a discourse.) The doctrine of the muscles.

MYO'PIA. (From μυω, to wink, and ωψ, the eye.) Near-sighted, purblind. The myopes are considered those persons who cannot see distinctly above twenty inches. The myopia is likewise adjudged to all those who cannot see at three, six, or nine inches. The proximate cause is the adunation of the rays of light in a focus before the retina. The species are, 1. *Myopia,* from too great a convexity of the cornea. The cause of this convexity is either from nativity, or a greater secretion of the aqueous humour: hence on one day there shall be a greater myopia than on another. An incipient hydrophthalmia is the origin of this myopia. 2. *Myopia,* from too great a longitude of the bulb. This length of the bulb is native, or acquired from a congestion of the humours in the eye; hence artificers occupied in minute objects, as the engravers of seals, and persons reading much, frequently after puberty become myopes. 3. *Myopia,* from too great a convexity of the anterior superficies of the crystalline lens. This is likewise from birth. The image will so much sooner be formed as the cornea or lens is more convex. This perfectly accounts for short-sightedness; but an anterior too great convexity of the cornea is the most common cause. 4. *Myopia,* from too great a density of the cornea, or humours of the eye. Optics teach us, by so much sooner the rays of light are forced into a focus, as the diaphanous body is denser. 5. *Myopia,* from mydriasis or too dilated a pupil. 6. *Myopia infantilis.* Infants, from the great convexity of the cornea, are often myopes; but by degrees, as they advance in years, they perceive objects more remotely, by the cornea becoming less convex.

My'ops. (From μυω, to wink, and ωψ, the eye.) One who is near-sighted.

MYO'SIS. Μυωσις, a disease of the eye. A contraction or too small perforation of the pupil: it is known by viewing the diameter of the pupil, which is smaller than usual, and remains so in an obscure place, where, naturally, if not diseased, it dilates. It occasions weak sight, or a vision that remains only a certain number of hours in the day; but, if wholly closed, total blindness. The species of this disorder are, 1. *Myosis spasmodica,* which is observed in the hysteric, hypochondriac, and in other spasmodic and nervous affections; it arises from a spasm of the orbicular fibres of the iris. 2. *Myosis paralytica* arises in paralytic disorders. 3. *Myosis inflammatoria,* which arises from an inflammation of the iris or uvea, as in the internal ophthalmia, hypopium, or wounded eye. 4. *Myosis,* from an accustomed contraction of the pupil. This frequently is experienced by those who contemplate very minute objects; by persons who write; by the workers of fine needle-work; and by frequent attention to microscopical inquiries. 5. *Myosis,* from a defect of the aqueous humour, as after extraction. 6. *Myosis nativa,* with which infants are born. 7. *Myosis naturalis,* is a coarctation of the pupil by light, or from an intense examination of the minutest objects. These coarctations of the pupil are temporary, and spontaneously vanish.

MYOSI'TIS. (From μυς, a muscle.) Inflammation of a muscle. It is the term given by Sagar to acute rheumatism.

Myoso'tis. (Μυς, a muscle, and ους, ωτος, an ear; so called because its leaves are hairy, and grow longitudinally like the ear of a mouse.) See *Hieracium pilosella.*

MYOTOMY. (From μυς, a muscle, and τεμνω, to cut.) The dissection of the muscles.

My'rica ga'le. The systematic name of the Dutch myrtle. *Myrtus brabantica. Myrtus anglica. Myrtifolia belgica. Gale. Gagel. Rus sylvestris. Acaron. Elæagnus. Elæagnus cordo. Chamælæagnus Dodonæo.* The leaves, flowers, and seeds of this plant, *Myrica gale,* of Linnæus, sweet willow, or Dutch myrtle, have a strong, fragrant smell, and a bitter taste. They are said to be used amongst the common people for destroying moths and cutaneous insects; and the infusion is given internally as a stomachic and vermifuge.

Myriophy´llon. (From μυριος, infinite, and φυλλον, a leaf, named from the number of its leaves.) See *Achillea millefolium*.

MYRI´STICA. The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Monadelphia*.

Myri´stica aroma´tica. Swartz's name of the nutmeg-tree.

Myri´stica moscha´ta. The systematic name of the tree which produces the nutmeg and mace. 1. The nutmeg, *Myristicæ nucleus*. *Nux moschata*. *Nucista*. *Nux myristica*. *Chrysobalanus Galeni*. *Unguentaria*. *Assala*. *Nux aromatica*. The seed, or kernel, of the *Myristica moschata*, *foliis lanceolatis*, *fructu glabro*, of Linnæus. It is a spice that is well known, and has been long used both for culinary and medical purposes. Distilled with water they yield a large quantity of essential oil, resembling in flavour the spice itself; after the distillation, an insipid sebaceous matter is found swimming on the water; the decoction, inspissated, gives an extract of an unctuous, very slightly bitterish taste, and with little or no astringency. Rectified spirit extracts the whole virtue of nutmegs, by infusion, and elevates very little of it in distillation; hence the spirituous extract possesses the flavour of the spice in an eminent degree. Nutmegs, when heated, yield to the press a considerable quantity of limpid, yellow oil. There are three kinds of unctuous substances, called oil of mace, though really expressed from the nutmeg. The best is brought from the East Indies, in stone jars; this is of a thick consistence, of the colour of mace, and has an agreeable fragrant smell; the second sort, which is paler-coloured, and much inferior in quality, comes from Holland, in solid masses, generally flat, and of a square figure; the third, which is the worst of all, and usually called common oil of mace, is an artificial composition of suet, palm-oil, and the like, flavoured with a little genuine oil of nutmeg. The medicinal qualities of nutmeg are supposed to be aromatic, anodyne, stomachic, and astringent; and hence it has been much used in diarrhœas and dysenteries. To many people, the aromatic flavour of nutmeg is very agreeable; they however, should be cautioned not to use it in large quantities, as it is apt to affect the head, and even to manifest an hypnotic power in such a degree as to prove extremely dangerous. Bontius speaks of this as a frequent occurrence in India; and Dr. Cullen relates a remarkable instance of this soporific effect of nutmeg, which fell under his own observation; and hence concludes that, in apoplectic and paralytic cases, this spice may be very improper. The officinal preparations of nutmeg are a spirit and an essential oil, and the nutmeg, in substance, roasted to render it more astringent: both the spice itself and the essential oil enter several compositions, as the *confectio aromatica*, *spiritus ammoniæ aromaticus*, &c.

2. Mace is the middle bark of the nutmeg. A thick, tough, reticulated unctuous membrane, of a lively, reddish-yellow colour, approaching to that of saffron, which envelopes the shell of the nutmeg. The mace, when fresh, is of a blood-red colour, and acquires its yellow hue in drying. It is dried in the sun, upon hurdles fixed above one another, and then, it is said, sprinkled with sea-water, to prevent its crumbling in carrying. It has a pleasant, aromatic smell, and a warm bitterish, moderately pungent taste. It is in common use as a grateful spice, and appears to be in its general qualities nearly similar to the nutmeg. The principal difference consists in the mace being much warmer, more bitter, less unctuous, and sitting easier on weak stomachs.

Mace possesses qualities similar to those of nutmeg, but is less astringent, and its oil is supposed to be more volatile and acrid.

Myri´stica nux. See *Myristica moschata*.

Myrme´cia. (From μυρμηξ, a pismire.) A small painful wart, of the size and shape of a pismire. See *Myrmecium*.

Myrme´cium. A moist soft wart about the size of a lupine, with a broad base, deeply rooted, and very painful. It grows on the palms of the hands and soles of the feet.

Myro´copum. (From μυρον, an ointment, and κοπος, labour.) An unguent to remove lassitude.

Myroba´lanus. (From μυρος, an unguent, and βαλανος, a nut, so called because it was formerly used in ointments.) A myrobalan. A dried fruit of the plum kind, brought from the East Indies. All the myrobalans have an unpleasant, bitterish, very austere taste, and strike an inky blackness with a solution of steel. They are said to have a gently purgative as well as an astringent and corroborating virtue. In this country they have been long expunged from the pharmacopœias. Of this fruit there are several species.

Myroba´lanus belli´rica. The Belliric myrobalan. This fruit is of a yellowish-grey colour, and an irregular roundish or oblong figure, about an inch in length, and three quarters of an inch thick.

Myroba´lanus che´bula. The chebule myrobalan. This resembles the yellow in figure and ridges, but is larger, of a darker colour, inclining to brown or blackish, and has a thicker pulp.

Myroba´lanus ci´trina. Yellow myrobalan. This fruit is somewhat longer than the Belliric, with generally five large longitudinal ridges, and as many smaller between them, somewhat pointed at both ends.

Myroba'lanus e'mblica. The emblic myrobalan is of a dark blackish-grey colour, roundish, about half an inch thick, with six hexagonal faces, opening from one another.

Myroba'lanus I'ndica. The Indian or black myrobalan, of a deep black colour, oblong, octangular, differing from all the others in having no stone, or only the rudiments of one, from which circumstance they are supposed to have been gathered before maturity.

Myrobalans. See *Myrobalanus.*

My'ron. (From μυρω, to flow.) An ointment, medicated oil, or unguent.

Myrophy'llum. *Millefolium aquaticum.* Water-fennel. It is said to be vulnerary.

MYRO'XYLON. (From μυρον, an ointment, and ξυλον, wood.) The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.*

Myro'xylon perui'ferum. The systematic name of the tree which gives out the Peruvian balsam. *Balsamum Peruvianum. Putzochill. Indian, Mexican,* and *American balsam. Carbareiba,* is the name of the tree from which, according to Piso and Ray, it is taken. It is the *Myroxylon peruiferum,* of Linnæus, which grows in the warmest provinces of South America, and is remarkable for its elegant appearance. Every part of the tree abounds with a resinous juice; even the leaves being full of transparent resinous points, like those of the orange-tree.

Balsam of Peru is of three kinds; or rather, it is one and the same balsam, having three several names: 1. The balsam of incision; 2. The dry balsam; 3. The balsam of lotion. The virtues of this balsam, as a cordial, pectoral, and restorative, stimulant, and tonic, are by some thought to be very great. It is given with advantage from 5 to 10 or 15 drops for a dose, in dyspepsia, atonic gout, in consumptions, asthmas, nephritic complaints, obstructions of the viscera, and suppressions of the menses. It is best taken dropped upon sugar. The yolk of an egg, or mucilage of gum-arabic, will, indeed, dissolve it; it may, by that way, be made into an emulsion; and it is less acrid in that form than when taken singly. It is often made an ingredient in boluses and electuaries, and enters into two of the officinal compositions: the tinctura balsami Peruviani composita, and the trochisci glycyrrhizæ. Externally, it is recommended as an useful application to relaxed ulcers, not disposed to heal.

MY'RRHA. (*Myrrha.* Heb.) Also called *stacte,* and the worst sort *ergasma.* A botanical specimen of the tree which affords this gum resin has not yet been obtained; but from the account of Mr. Bruce, who says it very much resembles the *acacia vera,* of Linnæus, there can be little doubt in referring it to that genus, especially as it corresponds with the description of the tree given by Disoscorides. The tree that affords the myrrh, which is obtained by incision, grows on the eastern coast of Arabia Felix, and in that part of Abyssinia which is situated near the Red Sea, and is called by Mr. Bruce, Troglodyte. Good myrrh is of a turbid black-red colour, solid and heavy, of a peculiar smell, and bitter taste. Its medicinal effects are warm, corroborant, and antiseptic; it has been given as an emmenagogue in doses from 5 to 20 grains, it is also given in cachexies, and applied externally as an antiseptic and vulnerary. In doses of half a drachm, Dr. Cullen remarks that it heated the stomach, produced sweat, and agreed with the balsams in affecting the urinary passages. It has lately come more into use as a tonic in hectical cases, and is said to prove less heating than most other medicines of that class. Myrrh dissolves almost totally in boiling water, but, as the liquor cools, the resinous matter subsides. Rectified spirit dissolves less of this concrete than water; but extracts more perfectly that part in which its bitterness, virtues, and flavour reside; the resinous matter which water leaves undissolved is very bitter, but the gummy matter which spirit leaves undissolved is insipid, the spirituous solution containing all the active part of the myrrh: it is applied to ulcers, and other external affections of a putrid tendency; and also as a wash, when diluted, for the teeth and gums. There are several preparations of this drug in the London and Edinburgh pharmacopœias.

Myrrhi'ne. (From μυρρα, myrrh; so called because it smells like myrrh.)

My'rrhis. (From μυρρα, myrrh; so named from its myrrh-like smell.) Sweet cicely; anti-scorbutic.

Myrsinelæ'um. (From μυρσινη, the myrtle, and ελαιον, oil.) Oil of myrtle.

Myrtaca'ntha. (From μυρτος, a myrtle, and ακανθα, a thorn; so called from its likeness to myrtle, and from its prickly leaves.) Butcher's broom. See *Ruscus.*

Myrti'danum. (From μυρτος, the myrtle.) An excrescence growing on the trunk of the myrtle, and used as an astringent.

Myrti'llus. See *Vaccinium myrtillus.*

Myrtiform caruncles. See *Carunculæ myrtiformes.*

Myrtiform glands. See *Carunculæ myrtiformes.*

Myrtle, common. See *Myrtus.*

Myrtle, Dutch. See *Myrica gale.*

Myrto chei'lides. (From μυρτον, the clitoris, and χειλος, a lip.) The nymphæ of the female pudenda.

My'rton. The clitoris.

My'rtum. (From μυρτος, a myrtle.). A little prominence in the pudenda of women, resembling a myrtle-berry. It also means the clitoris.

MY'RTUS. (From *μυρρα*, myrrh, because of its smell, or from *myrrha*, a virgin who was fabled to have been turned into this tree.) 1. The name of a genus of plants in the Linnæan system. Class, *Icosandria*. Order, *Monogynia*.

2. The pharmacopœial name of the *Myrrhine*. The myrtle. *Myrtus communis*, of Linnæus. The berries of this plant are recommended in alvine and uterine fluxes, and other disorders from relaxation and debility. They have a roughish, and not unpleasant taste, and appear to be moderately astringent and corroborant, partaking also of aromatic qualities.

My'rtus braba'ntica. See *Myrica gale*.

My'rtus caryophylla'ta. The systematic name of the tree which affords the clove bark. *Cassia caryophyllata*. The bark of this tree, *Myrtus caryophyllata; pedunculis trifido-multifloris, foliis ovatis*, of Linnæus, is a warm aromatic, of the smell of clove spice, but weaker, and with a little admixture of the cinnamon flavour. It may be used with the same views as cloves, or cinnamon.

My'rtus commu'nis. Myrtus communis italica. The systematic name of the common myrtle. See *Myrtus*.

My'rtus pime'nta. The systematic name of the tree which bears the Jamaica pepper. *Pimento. Piper caryophyllatum. Cocculi Indi aromatici. Piper chiapæ. Amomum pimenta. Caryophyllus aromaticus. Caryophyllus Americanus. Piper odoratum Jamaicense.* Jamaica pepper, or allspice. The berries of the *Myrtus pimenta; floribus trichotomo-paniculatis, foliis oblongo-lanceolatis*, of Linnæus. This spice, which was first brought over for dietetic uses, has been long employed in the shops as a succedaneum to the more costly oriental aromatics: it is moderately warm, of an agreeable flavour, somewhat resembling that of a mixture of cloves, cinnamon, and nutmegs. Both pharmacopœias direct an aqueous and spirituous distillation to be made from these berries; and the Edinburgh College orders the *oleum essentiale piperis Jamaicensis*.

MY'STAX. The hair which forms the beard in man, on each side the upper lip.

Myu'rus. An epithet for a sort of sinking pulse, when the second stroke is less than the first, the third than the second, &c. Of this there are two kinds: the first is when the pulse so sinks as not to rise again; the other, when it returns again, and rises in some degree. Both are esteemed bad presages.

Myxosarco'ma. (From *μυξα*, mucus, and *σαρξ*, flesh.) *Mucocarneus*. A tumour which is partly fleshy and partly mucous.

My'xter. (From *μυξα*, the mucus of the nose.) The nose or nostril.

N.

N. In prescriptions this letter is a contraction for *numero*, in number.

Na'cta. An abscess of the female breast.

Na'ducem. A uterine coagulum, or mole.

Næ'vi mate'rni. *Maculæ matricis. Stigmata. Metrocelides.* Mothers' marks. Marks on the skin of children, which are born with them, and which are said to be produced by the longing of the mother for particular things, or her aversion to them; hence they resemble mulberries, strawberries, grapes, pines, bacon, &c.

Na'i coro'na. A name of the cowage.

Nail. *Unguis.* A horny lamina situated on the extremity of the fingers and toes.

Na'kir. According to Schenkius this means wandering pains of the limbs.

NAPE'LLUS. (A diminitive of *napus*, a kind of turnip; so called because it has a bulbous root like that of the napus.) See *Aconitum*.

Na'phæ flo'res. Orange flowers are sometimes so called. See *Citrus aurantium*.

NA'PHTHA. *Ναφθα*. A very fluid species of petroleum, of a lighter colour than petroleum, more or less transparent, perfectly thin and liquid, light so as to float on water, odoriferous, volatile, and inflammable. It is found separated by nature from petroleum and bitumen, but its separation is readily effected by art. This fluid has been used as an external application for removing old pains, nervous disorders, such as cramps, contractions of the limbs, paralytic affections, &c.

Napifo'lia. Bare cole.

Na'pium. The name of the nipple wort. A species of lapsana. It is one of the bitter lactescent plants, similar in virtues to endive. See *Lapsana*.

Na'pus. (From *napus*, Rabb.) See *Brassica*.

Na'pus du'lcis.
Na'pus sylve'stris. } See *Brassica rapa*.

Narca′phthum. An aromatic confect.

NARCI′SSUS. The daffodil. A genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.*

Narco′sis. (From ναρκοω, to stupefy.) Stupefaction, stupor, numbness.

NARCOTICS. (*Narcotica,* sc. *Medicamenta.* From ναρκοω, to stupefy.) Those medicines which have the power of procuring sleep. See *Anodoynes.*

Nard, Celtic. See *Valeriana Celtica.*

Nard, Indian. See *Nardus Indica.*

Nardo′stachys. (From ναρδος, spikenard, and ϛαχυς, sage.) A species of wild sage resembling spikenard in its leaves and smell.

Na′rdus. (From *nard,* Sir.) Spikenard.

Na′rdus ce′ltica. *Valeriana celtica.*

Na′rdus I′ndica. *Spica nardi. Spica Indica.* Indian nard or spikenard. The root of this plant, *Andropogon nardus, of* Linnæus, is an ingredient in the mithridate and theriaca; it is moderately warm and pungent, accompanied with a flavour not disagreeable. It is said to be used by the Orientals as a spice.

Na′rdus ita′lica. The lavendula latifolia.

Na′rdus monta′na. An old name of the asarabacca.

Na′rdus ru′stica. An old name of the asarabacca. See *Asarum.*

NA′RES (Pl. of *naris.*) *Mycteres.* The nostrils. The cavity of the nostrils is of a pyramidal figure, and is situated under the anterior part of the cranium, in the middle of the face. It is composed of fourteen bones, viz. the frontal, two maxillary, two nasal, two lachrymal, two inferior spongy, the sphenoid, the vomer, the ethmoid, and two palatine bones, which form several eminences and cavities. The eminences are the septum narium, the cavernous substance of the ethmoid bone, called the superior conchæ, and the inferior spongy bones. The cavities are three pair of pituitary sinuses, namely, the frontal, sphenoid and maxillary; the anterior and posterior foramina of the nostrils; the ductus nasalis, the spheno-palatine foramina, and anterior palatine foramina. All these parts are covered with periosteum, and a pituitary membrane which secretes the mucus of the nostrils. The arteries of this cavity are branches of the internal maxillary. The veins empty themselves into the internal jugulars. The nerves are branches of the olfactory, ophthalmic, and superior maxillary. The use of the nostrils is for smelling, respiration, and speech.

Narifuso′ria. (From *nares,* the nostrils, and *fundo,* to pour.) Medicines dropped into the nostrils.

Na′ris compre′ssor. See *Compressor naris.*

Na′rta. (Ναρτα, *ex nardi odore,* from its smell.) A plant used in ointments.

Narthe′cia. (From *Narthecis,* the island where it flourished.) *Narthex.* A kind of fennel.

Nasa′lia. (From Nasus, the nose.) Errhines.

Nasa′lis la′bii superio′ris. See *Orbicularis oris.*

Nasa′rium. (From *nasus,* the nose.) The mucus of the nose.

Nasca′le. (From *nasus,* the nose.) A wood or cotton pessary for the nose.

Nasca′phthum. See *Narcaphthum.*

Na′si depre′ssor. See *Depressor labii superioris alæque nasi.*

NA′SI O′SSA. (*Nasus,* the nose.) The two small bones of the nose that are so termed form the bridge of the nose. In figure they are quadrangular and oblong.

NASTU′RTIUM. (*Quod nasum torqueat,* because the seed, when bruising, irritates the nose.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.*

Nastu′rtium aqua′ticum. See *Sisymbrium nasturtium.*

Nastu′rtium horte′nse. See *Lepidium sativum.*

Nastu′rtium i′ndicum. See *Tropæolum majus.*

Na′ta. *Natta.* A species of wen with slender pendent neck. Linnæus speaks of it as rooted in a muscle.

NA′TES. (From *nato,* to flow; because the excrements are discharged from them.)

1. The buttocks, or the fleshy parts upon which we sit.

2. Two of the eminences, called tubercula quadrigemina, of the brain, are so named from their resemblance.

Na′tes ce′rebri. See *Tubercula quadrigemina.*

NA′TRON. (So called from *Natron,* a lake in Judæa, where it was produced.) *Natrum.*

1. The name formerly given by the College of Physicians to the alkali, now called soda.

2. A native salt, which is found crystallized in Egypt, in the lake called Natron, and in other hot countries, in sands surrounding lakes of salt water. It is an impure subcarbonate of soda.

3. The name of an impure subcarbonate of soda, obtained by burning various marine plants. See *Soda.*

Na′tron muria′tum. See *Sodæ murias.*

Na′tron præpara′tum. See *Sodæ subcarbonas.*

Na′tron tartarisa′tum. See *Soda tartarizata.*

Na′tron vitriola′tum. See *Sodæ sulphas.*

Na′tulæ. (Dim. of *nates,* the buttocks; so called from their resemblance.) Two prominences of the brain. See *Tubercula quadrigemina.*

NATURAL ACTIONS. Those actions by which the body is preserved; as hunger, thirst, &c. See *Actions.*

Natura'lia. (From *natura,* nature.) The parts of generation.

NAU'SEA. (Ναυσεα: from ναυς, a ship; because it is a sensation similar to that which people experience upon sailing in a ship. *Nausiosis. Nautia.* An inclination to vomit without effecting it; also a disgust of food approaching to vomiting. It is an attendant on cardiaglia, and a variety of other disorders, pregnancy, &c. occasioning an aversion for food, an increase of saliva, disgusted ideas at the sight of various objects, loss of appetite, debility, &c.

Nausio'sis. See *Nausea.*

Nau'tia. See *Nausea.*

Nau'ticus. (*Nauticus,* a sailor; so called from the use which sailors make of it; in climbing ropes.) A muscle of the leg, exerted in climbing up.

Navew, garden. See *Brassica rapa.*

Navew, sweet. } See *Brassica ra pa*
Navew, wild. }

NAVICULA'RE OS. (From *navicula,* a little boat.) *Naviformis. Navicularis. Os scaphoides.* A bone of the carpus and tarsus is so called, from its supposed resemblance to a boat. See *Carpus* and *tarsus.*

Navicula'ris. See *Naviculare os.*

Navifo'rmis. A name of the os naviculare.

Neapolita'nus mo'rbus. (From *Neapolis,* or *Naples,* because it was said to have been first discovered at Naples, when the French were in possession of it.) The venereal disease.

Ne'bula. (From νεφελη.) 1. A cloudy spot in the cornea of the eye.

2. The cloud-like appearance in the urine, after it has been a little time at rest.

NECK. *Collum.* The parts which form the neck are divided into external and internal. The external parts are the common integuments, several muscles, eight pair of cervical nerves, the eighth pair of nerves of the cerebrum, and the great intercostal nerve; the two carotid arteries, the two external jugular veins, and the two internal; the glands of the neck, viz. the jugular, submaxillary, cervical, and thyroid. The internal parts are the fauces, pharynx, œsophagus, larynx, and trachea. The bones of the neck are the seven cervical vertebræ.

NECRO'SIS. (From νεκροω, to destroy.) This word, the strict meaning of which is only mortification, is, by the general consent of surgeons, confined to this affection of the bones. The death of parts of bones was not distinguished from caries, by the antients. However, necrosis and caries are essentially different; for in the first, the affected part of the bone is deprived of the vital principle; but this is not the case when it is simply carious. Caries is very analogous to ulceration, while necrosis is exactly similar to mortification of the soft parts.

Necro'sis ustilagi'nea. A painful convulsive contraction of the limbs. See *Raphania.*

Ne'ctar. Νεκταρ. A wine made of honey.

Nedy'ia. (From νηδυς, the belly.) *Nedys.* The intestines.

Ne'dys. See *Nedyia.*

Negro cachexy. *Cachexia Africana.* Mal d'estomac of the French. A propensity for eating earth, peculiar to males as well as females, in the West Indies and Africa.

Nelæ'ra. (From νειαρος, furthermost.) The lower part of the belly.

Nemoro'sa. (From *nemus,* a grove; so called because it grows in woods.) A species of anemone.

Nep. See *Nepeta.*

Ne'pa theophra'sti. The spartium scoparium.

Nepe'nthos. (From νη, neg. and ϖενθος, grief; so called from their exhilarating qualities.) A preparation of opium, and a kind of bugloss.

Ne'peta. (From *nepte,* Germ.) *Herba felis.* Nep, or catmint; so called because cats are very fond of it. The leaves of this plant, *Nepeta cataria; floribus spicatis; verticillis subpedicellatis; foliis petiolatis, cordatis, dentato-serratis,* of Linnæus, have a moderately pungent aromatic taste, and a strong smell, like an admixture of spearmint and penny-royal. The herb is recommended in uterine disorders, dyspepsia, and flatulency.

Ne'peta cata'ria. The systematic name of the catmint. See *Nepeta.*

Nepete'lla. (Dim. of *nepeta.*) The lesser catmint.

Ne'phela. (Dim. of νεφος, a cloud.) A cloud-like spot on the cornea of the eye.

Nepheloi'des. (From νεφελη, a cloud, and ειδος, a likeness.) Cloudy. Applied to the urine.

NEPHRA'LGIA. (From νεφρος, the kidney, and αλγος, pain.) Pain in the kidney.

Nephra'lgia calculo'sa. Pain from stone in the kidneys.

Nephra'lgia rheuma'tica, The lumbago, or pain in the loins.

Nephrelmi'nthica ischu'ria. (From νεφρος, the kidney, and ελμινς, a worm.) Applied to a suppression of urine from worms.

Nephritic wood. See *Guilandina moringa.*

Nephri'tica a'qua. Spirituous distillation of nutmeg and hawthorn flowers.

NEPHRITICS. (*Nephritica,* sc. *medicamenta;* from νεφρος, the kidney. Medicines are so termed that are employed in the cure of diseases of the kidneys.

Nephri'ticum li'gnum. See *Guilandina moringa.*

NEPHRI'TIS. (From νεφρος, a kidney.) Inflammation of the kidney. A genus of disease in the class *pyrexiæ,* and order *phlegmasiæ,* of Cullen; known by pyrexia, pain in the region of the kidneys, and shooting along the course of the ureter; drawing up of the testicles; numbness of the thigh; vomiting; urine high coloured, and frequently discharged; costiveness, and colic pains. Nephritis is symptomatic of calculus, gout, &c.

This inflammation may be distinguished from the colic, by the pain being seated very far back, and by the difficulty of passing urine, which constantly attends it; and it may be distinguished from rheumatism, as the pain is but little influenced, or increased, by motion.

Nephritis is to be distinguished from a calculus in the kidney, or ureter, by the symptoms of fever accompanying, or immediately following the attack of pain, and these continuing without any remarkable intermission; whereas, in a calculus of the kidney, or ureter, they do not occur until a considerable time after violent pain has been felt. In the latter case too, a numbness of the thigh, and a retraction of the testicle on the affected side, usually takes place.

The causes which give rise to nephritis are external contusions, strains of the back, acrids conveyed to the kidneys in the course of the circulation, violent and severe exercise, either in riding or walking, calculous concretions lodged in the kidneys, or ureters, and exposure to cold. In some habits, there is an evident predisposition to this complaint, particularly the gouty, and in these there are often translations of the matter to the kidneys, which very much imitate nephritis.

An inflammation of the kidney is attended with a sharp pain on the affected side, extending along the course of the ureter; and there is a frequent desire to make water, with much difficulty in making it; the body is costive, the skin is dry and hot, the patient feels great uneasiness when he endeavours to walk, or sit upright; he lies with most ease on the affected side, and is generally troubled with nausea and frequent vomiting.

When the disease is protracted beyond the seventh or eighth day, and the patient feels an obtuse pain in the part, has frequent returns of chilliness and shiverings, there is reason to apprehend that matter is forming in the kidney, and that a suppuration will ensue.

Dissections of nephritis show the usual effects of inflammation on the kidney; and they likewise often discover the formation of abscesses, which have destroyed its whole substance. In a few instances, the kidney has been found in a scirrhous state.

The disease is to be treated by bleeding general and local, the warm bath, or fomentations to the loins, emollient clysters, mucilaginous drinks, and the general antiphlogistic plan. The bowels should be effectually cleared at first by some sufficiently active formula, but the saline cathartics are considered not so proper, as they may add to the irritation of the kidney: calomel with antimonial powder, followed by the infusion of senna, or the ol ricini, may be given in preference, and repeated occasionally. It will be right also to endeavour to promote diaphoresis, by moderate doses of antimonials especially. Blisters are inadmissible in this disease, but the linimentum ammoniæ, or other rubefacient application, may in some measure supply their place. Opium will often prove useful, particularly where the symptoms appear to originate from calculi, given in the form of glyster, or by the mouth: in which latter mode of using it, however, it will be much better joined with other remedies, which may obviate its heating effect, and determine it rather to pass off by the skin. A decoction of the dried leaves of the peach-tree is said to have been serviceable in many cases of this disease. In affections of a more chronic nature, where there is a discharge of mucus, or pus, by urine, in addition to suitable tonic medicines, the uva ursi in moderate doses, or some of the terebinthinate remedies, may be given with probability of relief.

Nephroli'thica ischu'ria. (From νεφρος, a kidney, and λιθος, a stone.) Applied to an ischury, from a stone in the kidneys.

Nephrome'træ. The psoæ muscles.

Nephroplетho'ricus. (From νεφρος, a kidney, and πληθωρα, a plethora.) Applied to a suppression of urine from a plethora.

Nephrophlegma'ticus. (From νεφρος, a kidney, and φλεγμα, phlegm.) Applied to a suppression of urine from pituitous or mucous matter in the kidneys.

Nephrople'gicus. (From νεφρος, a kidney, and πληγη, a stroke.) A suppression of urine from a paralysis of the kidney, is called ischuria nephroplegica.

Nephropy'icus. (From νεφρος, a kidney, and πυον, pus.) Applied to a suppression of urine from purulent matter in the kidneys.

NE'PHROS. (From νεω, to flow, and φερω, to bear; as conveying the urinary fluid.) A kidney.

Nephrospa'sticus. (From νεφρος, a kidney, and σπαω, to contract.) Applied to a suppression of urine from a spasm of the kidneys.

Nephrothromboi'des. (From νεφρος, a kidney, θρομβος, a grumous concretion, and ειδος, a likeness.) Applied to a suppression of urine from grumous blood in the kidneys.

NEPHROTOMY. (*Nephrotomia;*

from νεφρος, a kidney, and τεμνω, to cut.) The operation of extracting a stone from the kidney. A proceeding which, perhaps, has never been actually put in practice. The cutting into the kidney, the deep situation of this viscus, and the want of symptoms by which the lodgment of a stone in it can be certainly discovered, will always be strong objections to the practice.

NE′RIUM. (From νηρος, humid; so called because it grows in moist places.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Ne′rium antidysente′ricum. The systematic name of the tree which affords the Codaga pala bark. *Conessi cortex. Codaga pala. Cortex profluvii.* The bark of the *Nerium antidysentericum; foliis ovatis, acuminatis, petiolatis,* of Linnæus. It grows on the coast of Malabar. It is of a dark black colour externally, and generally covered with a white moss, or scurf. It is very little known in the shops; has an austere, bitter taste; and is recommended in diarrhœas, dysenteries, &c. as an adstringent.

Ne′roli o′leum. Essential oil of orange flowers. See *Citrus aurantium.*

Nerva′lia o′ssa. (From *nervus,* a nerve.) The bones through which the nerves pass.

NERVE. *Nervus.* Formerly it meant a sinew. This accounts for the opposite meanings of the word *nervous;* which sometimes means strong, sinewy; and sometimes weak, and irritable. Nerves are long, white, medullary cords that serve for sensation. They originate from the brain and spinal marrow; hence they are distinguished into cerebral and spinal nerves, and distributed upon the organs of sense, the viscera, vessels, muscles, and every part that is endowed with sensibility. The cerebral nerves are the olfactory, optic, motores oculorum, pathetici, or trochleatores, trigemini, or divisi, abducent, auditory, or acoustic, par vagum and lingual. Heister has drawn up the uses of these nerves in the two following verses:

> *Olfaciens, cernens, oculosque movens, patiensque,*
> *Gustans, abducens, audiensque, vagansque, loquensque.*

The spinal nerves are thirty pair, and are divided into eight pair of cervical, twelve pair of dorsal, five pair of lumbar, and five of sacral nerves. In the course of the nerves there are a number of knots: these are called *ganglions;* they are commonly of an oblong shape, and of a grayish colour, somewhat inclining to red, which is, perhaps, owing to their being extremely vascular. Some writers have considered these little ganglions as so many little brains. Lancisi fancied he had discovered muscular fibres in them, but they certainly are not of an irritable nature. A late writer (Dr. Johnson) imagines they are intended to deprive us of the power of the will over certain parts, as the heart, for instance; but if this hypothesis were well founded, they should be met with only in nerves leading to involuntary muscles; whereas it is certain that the voluntary muscles receive nerves through ganglions. Dr. Munro, from observing the accurate intermixture of the minute nerves which compose them, considers them as new sources of nervous energy. The nerves, like the blood-vessels, in their course through the body, communicate with each other, and each of these communications constitutes what is called a *plexus,* from whence branches are again detached to different parts of the body. The use of the nerves is to convey impressions to the brain, from all parts of the system, and the principles of motion and sensibility from the brain to every part of the system. The manner in which this operation is effected is not yet determined. The inquiry has been a constant source of hypothesis in all ages, and has produced some ingenious ideas, and many erroneous positions, but without having hitherto afforded much satisfactory information. Some physiologists have considered a trunk of nerves as a solid cord, capable of being divided into an infinite number of filaments, by means of which the impressions of feeling are conveyed to the common sensorium. Others have supposed each fibril to be a canal, carrying a volatile fluid, which they term the *nervous fluid.* Those who contend for their being solid bodies, are of opinion that feeling is occasioned by vibration; so that, for instance, according to this hypothesis, by pricking the finger, a vibration would be occasioned in the nerve distributed through its substance; and the effects of this vibration, when extended to the sensorium, would be an excital of pain; but the inelasticity, the softness, the connection, and the situation of the nerves, are so many proofs that vibration has no share in the cause of feeling.

A Table of the Nerves.

Cerebral Nerves.

1. The *first pair,* called *olfactory.*
2. The *second pair,* or *optic nerves.*
3. The *third pair,* or *oculorum motores.*
4. The *fourth pair,* or *pathetici.*
5. The *fifth pair,* or *trigemini,* which gives off
   - a. The *ophthalmic,* or *orbital nerve,* which sends
     1. A *branch* to unite with one from the sixth pair, and form the great intercostal nerve.
     2. The *frontal nerve.*
     3. The *lachrymal.*
     4. The *nasal.*
   - b. The *superior maxillary,* which divides into
     1. The *spheno palatine* nerve.

2. The *posterior alveolar*.
3. The *infra orbital*.

c The *inferior maxillary* nerve, from which arise
1. The *internal lingual*.
2. The *inferior maxillary* properly so called.

6. The *sixth pair*, or *abducentes*, which send off

1. A *branch* to unite with one from the fifth, and form the great intercostal.

7. The *seventh pair*, or *auditory nerves*, these arise by two separate beginnings, viz.

The *portio dura*, a nerve going to the face.

The *portio mollis*, which is distributed on the ear.

The *portio dura*, or *facial* nerve, gives off the *chorda tympani*, and then proceeds to the face.

8. The *eighth pair*, or *par vagum*, arise from the medulla oblongata, and join with the accessory of Willis. The par vagum gives off

1. The *right* and *left recurrent nerve*.
2. Several branches in the chest, to form the *cardiac plexus*.
3. Several branches to form the *pulmonic plexus*.
4. Several branches to form the *æsophageal plexus*.
5. It then forms in the abdomen the *stomachic plexus*.
6. The *hepatic plexus*.
7. The *splenic plexus*.
8. The *renal plexus*, receiving several branches from the great intercostal, which assists in their formation.

9. The *ninth pair*, or *lingual nerves*, which go from the medulla oblongata to the tongue.

SPINAL NERVES.

Those nerves are called *spinal* which pass out through the lateral or intervertebral foramina of the spine.

They are divided into *cervical*, *dorsal*, *lumbar*, and *sacral* nerves.

CERVICAL NERVES.

The *cervical nerves* are *eight* pairs.

The *first* are called the *occipital*; they arise from the beginning of the spinal marrow, pass out between the margin of the occipital foramen and atlas, form a ganglion on its transverse process, and are distributed about the occiput and neck.

The *second* pair of cervical nerves send a branch to the accessory nerve of Willis, and proceed to the parotid gland and external ear.

The *third* cervical pair supply the integuments of the scapula, the cucullaris, and triangularis muscles, and send a branch to form with others the diaphragmatic nerve.

The *fourth*, *fifth*, *sixth*, *seventh*, and *eighth* pair all converge to form the *brachial plexus*, from which arise the six following

NERVES OF THE UPPER EXTREMITIES.

1. The *axillary* nerve, which sometimes arises from the radial nerve. It runs backwards and outwards around the neck of the humerus, and ramifies in the muscles of the scapula.

2. The *external cutaneal*, which perforates the coraco-brachialis muscle, to the bend of the arm, where it accompanies the median vein as far as the thumb, and is lost in its integuments.

3. The *internal cutaneal*, which descends on the inside of the arm, where it bifurcates. From the bend of the arm the anterior branch accompanies the basilic vein, to be inserted into the skin of the palm of the hand; the posterior branch runs down the internal part of the fore-arm, to vanish in the skin of the little finger.

4. The *median* nerve, which accompanies the brachial artery to the cubit, then passes between the brachialis internus, pronator rotundus, and the perforatus and perforans, under the ligament of the wrist to the palm of the hand, where it sends off branches in every direction to the muscles of the hand, and then supplies the digital nerves, which go to the extremities of the thumb, fore and middle fingers.

5. The *ulnar* nerve, which descends between the brachial artery and basilic vein, between the internal condyle of the humerus, and the olecranon, and divides in the fore-arm into an *internal* and *external* branch. The former passes over the ligament of the wrist and sesamoid bone, to the hand where it divides into three branches, two of which go to the ring and little finger, and the third forms an arch towards the thumb, in the palm of the hand, and is lost in the contiguous muscles. The latter passes over the tendon of the extensor carpi ulnaris and back of the hand, to supply also the two last fingers.

6. The *radial* nerve, which sometimes gives off the axillary nerve. It passes backwards, about the os humeri, descends on the outside of the arm, between the brachialis externus and internus muscles to the cubit; then proceeds between the supinator longus and brevis, to the superior extremity of the radius, giving off various branches to adjacent muscles. At this place it divides into two branches; *one* goes along the radius, between the supinator longus and radialis internus to the back of the hand, and terminates in the interosseous muscles, the thumb and three first fingers; the *other* passes between the supinator brevis and head of the radius, and is lost in the muscles of the fore-arm.

DORSAL NERVES.

The *dorsal* nerves are twelve pairs in number. The first pair gives off a branch to the brachial plexus. All the dorsal nerves are distributed to the muscles of the back, intercostals, serrati, pectoral, abdominal muscles, and diaphragm. The five inferior pairs go to the cartilages of the ribs, and are called *costal.*

Lumbar Nerves.

The five pair of lumbar nerves are bestowed about the loins and muscles, skin of the abdomen and loins, scrotum, ovaria, and diaphragm. The second, third, and fifth pair unite and form the *obturator nerve,* which descends over the psoas muscle into the pelvis, and passes through the foramen thyroideum to the oburator muscle, triceps, pectineus, &c.

The third and fourth, with some branches of the second pair, form the *crural nerve,* which passes under Poupart's ligament with the femoral artery, sends off branches to the adjacent parts, and descends in the direction of the sartorius muscle to the internal condyle of the femur, from whence it accompanies the saphena vein to the internal ankle, to be lost in the skin of the great toe.

The fifth pair are joined to the first pair of the sacral nerves.

Sacral Nerves.

There are five pair of *sacral* nerves, all of which arise from the *cauda equina,* or termination of the medulla spinalis, so called from the nerves resembling the tail of a horse. The four first pair give off branches to the pelvic viscera, and are afterwards united to the last lumbar, to form a large *plexus,* which gives off

The *ischiatic nerve,* the largest in the body. The ischiatic nerve, immediately at its origin, sends off branches to the bladder, rectum, and parts of generation; proceeds from the cavity of the pelvis through the ischiatic notch, between the tuberosity of the ischium and great trochanter, to the ham, where it is called the *popliteal nerve.* In the ham it divides into two branches.

1. The *peroneal,* which descends on the fibula, and distributes many branches to the muscles of the leg and back of the foot.

2. The *tibial,* which penetrates the gastrocnemii muscles to the internal ankle, passes through a notch in the os calcis to the sole of the foot, where it divides into an *internal* and *external plantar* nerve, which supply the muscles and aponeurosis of the foot and the toes.

Physiology of the Nervous System.

The nervous system as the organ of sense and motion, is connected with so many functions of the animal economy, that the study of it must be of the utmost importance, and a fundamental part of the study of the whole economy. The nervous system consists of the medullary substance of the brain, cerebellum, medulla oblongata, and spinalis; and of the same substance continued into the nerves, by which it is distributed to many different parts of the body. The whole of this system seems to be properly distinguished into these four parts.

1. The medullary substance contained in the cranium and vertebral cavity; the whole of which seems to consist of distinct fibres, but without the smaller fibres being separated from each other by any evident enveloping membranes.

2. Connected with one part or other of this substance are, the nerves, in which the same medullary substance is continued; but here more evidently divided into fibres, each of which is separated from the others by an enveloping membrane, derived from the pia mater.

3. Parts of the extremities of certain nerves, in which the medullary substance is divested of the enveloping membranes from the pia mater, and so situated as to be exposed to the action of certain external bodies, and perhaps so framed as to be affected by the action of certain bodies only; these are named the *sentient extremities* of the nerves.

4. Certain extremities of the nerves, so framed as to be capable of a peculiar contractility; and, in consequence of their situation and attachments to be, by their contraction, capable of moving most of the solid and fluid parts of the body. These are named the *moving extremities* of the nerves.

These several parts of the nervous system are every where the same continuous medullary substance, which is supposed to be the vital solid of animals, so constituted in living animals, and in living systems only, as to admit of motions being readily propagated from any one part to every other part of the nervous system, so long as the continuity and natural living state of the medullary substance remains. In the living man, there is an immaterial thinking substance, or *mind,* constantly present, and every phenomenon of thinking is to be considered as an affection or faculty of the mind alone. But this immaterial and thinking part of man is so connected with the material and corporeal part of him, and particularly with the nervous system, that motions excited in this give occasion to thought, and thought, however occasioned, gives occasion to new motions in the nervous system. This mutual communication, or influence, is assumed with confidence as a fact: but the mode of it we do not understand, nor pretend to explain; and therefore are not bound to obviate the difficulties that attend any of the suppositions which have been made concerning it. The phenomena of the nervous system occur commonly in the following order: The impulse of external bodies acts upon the sentient extremities of the nerves; and this gives occasion to perception or thought, which, as first arising in the mind, is termed *sensation.* This sensation, according to its various modifications, gives occasion to *volition*, or the willing of certain ends to be obtained by the motion of certain parts of the body; and this volition gives occasion to the contraction of muscular fibres, by which the motion of the part required is produced. As the impulse of bodies on the sentient extremities of a nerve does not occasion any sensation, unless the nerve between the sentient extremity and the brain be free; and as, in like manner, volition does not produce any contraction of muscles, unless the nerve between the brain and muscle be also free; it is concluded, from both these facts, that sensation and volition, so far as they are connected with corporeal motions, are functions of the brain alone; and it is presumed, that sensation arises only in consequence of external impulse producing motion in the sentient extremities of the nerves, and of that motion being thence propagated along the nerves to the brain; and, in like manner, that the will operating in the brain only, by a motion begun there, and propagated along the nerves, produces the contraction of muscles. From what is now said, we perceive more distinctly the different functions of the several parts of the nervous system; 1. The sentient extremities seem to be particularly fitted to receive the impressions of external bodies; and, according to the difference of these impressions, and of the condition of the sentient extremity itself, to propagate along the nerves motions of a determined kind, which, communicated to the brain, give occasion to sensation. 2. The brain seems to be a part fitted for, and susceptible of, those motions with which sensation, and the whole consequent operations of thought, are connected: and thereby is fitted to form a communication between the motions excited in the sentient, and those in consequence arising in the moving extremities of the nerves, which are often remote and distant from each other. 3. The moving extremities are so framed as to be capable of contraction, and of having this contraction excited by motion propagated from the brain, and communicated to the contractile fibre. 4. The nerves, more strictly so called, are to be considered as a collection of medullary fibres, each enveloped in its proper membrane, and thereby so separated from every other, as hardly to admit of any communication of motion from any one to the others, and to admit only of motion along the continuous medullary substance of the same fibre, from its origin to the extremities, or contrarywise. From this view of the parts of the nervous system, of their several functions and communication with each other, it appears, that the beginning of motion in the animal economy, is generally connected with sensation: and that the ultimate effects of such motion are chiefly actions depending immediately upon the contraction of moving fibres, between which and the sentient extremities the communication is by means of the brain.

Ne'rvea spongio'sa. The cavernous part of the penis.

Ne'rvi intercosta'les innomina'ti. The fifth pair of nerves.

NERVINES. (*Nervina*, sc. *medicamenta*, from *nervus.*) Neurotics. Medicines that relieve disorders of the nerves. They are all the antispasmodics, and the various preparations of bark and iron.

Nervo'rum resolu'tio. A species of apoplexy or palsy.

Nervo'sum os. The occipital bone.

Nervous consumption. See *Atrophia.*

Nervous diseases. See *Neuroses.*

Nervous Fever. See *Febris nervosa.*

Nervous head-ache. See *Cephalalgia.*

NERVOUS FLUID. Nervous principle. The vascularity of the cortical part of the brain, and of the nerves themselves, their softness, pulpiness, and natural humid appearance, give reason to believe that between the medullary particles of which they are principally composed, a fine fluid is constantly secreted, which may be fitted to receive and transmit, even more readily than other fluids do, all impressions which are made on it. It appears to exhale from the extremities of the nerves. The lassitude and debility of *muscles* from too great exercise, and the dulness of the sensorial organs from excessive use, would seem to prove this. It has no *smell* nor *taste;* for the cerebrine medulla is insipid and inodorous. Nor has it any *colour,* for the cerebrum and nerves are white. It is of so subtile a *consistence,* as never to have been detected. Its *mobility* is *stupendous,* for in less than a moment, with the consent of the mind, it is conveyed from the cerebrum to the muscles, like the electric matter. Whether the nervous fluid be carried from the organ of sense in the *sensorial* nerves to the cerebrum, and from thence in the *motory* nerves to the muscles, cannot be positively affirmed. The *constituent principles* of this liquid are perfectly unknown, as they cannot be rendered visible by art, or proved by experiment. Upon making a ligature upon a nerve, the motion of the fluid is interrupted, which proves that something corporeal flows through it. It is therefore a weak argument to deny its existence because we cannot see it; for who has seen the matter of heat, oxygen, azote, and other elementary bodies, the existence of which no physician in the present day doubts? The *electric matter,* whose action on the nerves is very great, does not appear to constitute the nervous fluid; for nerves exhibit no signs of spontaneous electricity; nor can it be the *magnetic matter,* as the experiment of Gavian with the magnet demonstrates; nor is it *oxygen,* nor *hydrogen,* nor *azote;* for the first very much irritates the nerves, and the other two suspend their action. The nervous fluid, therefore, is an *element* sui generis, which exists and is produced in the nerves only; hence, like other elements, it is only to be known by its effects. The pulpous softness of some nerves, and their lax situation, does not allow them and the brain to act on the body and soul only by *oscillation*. Lastly, a tense chord, although tied, oscillates. The *use* of the nervous fluid is, 1. It appears to be an intermediate substance between the body and the soul, by means of which the latter thinks, perceives, and moves the muscles subservient to the will. Hence the body acts upon the soul, and the soul upon the body. 2. It appears to differ from the *vital principle*; for parts live and are irritable which want nerves, as bones, tendons, plants, and insects.

Nervous principle. See *Nervous fluid*.

Ne'stis. (From νη, neg. and εσθιω, to eat; so called because it is generally found empty.) The jejunum.

Nettle, common. See *Urtica*.

Nettle, dead. See *Lamium album*.

Nettle-rash. See *Urticaria*.

Neurochondro'des. (From νευρον, a sinew, χονδρος, a cartilage, and ειδος, resemblance.) A hard substance between a sinew and a cartilage.

NEUROLOGY. (From νευρον, a nerve, and λογος, a discourse.) The doctrine of the nerves.

Neurome'tores. (From νευρον, a nerve, and μητρα, a matrix.) The psoas muscles are so called by Fallopius, as being the repository of many small nerves.

NEURO'SES. (From νευρον, a nerve.) Nervous diseases. The second class of Cullen's nosology is so called; it comprehends affections of sense and motion disturbed; without either idiopathic pyrexia, or topical diseases.

Neuro'tica. (From νευρον, a nerve.) Nervous medicines.

Neuro'tomy. (*Neurotomia*; from νευρον, a nerve, and τεμνω, to cut.) A dissection of the nerves. Also a puncture of a nerve.

NEUTRAL SALTS. Secondary salts. Under the name of neutral or secondary salts are comprehended such matters as are composed of two primitive saline substances combined together. They are called neutral, because they do not possess the characters of acid nor alkaline salts, which are primitive salts; such are Epsom salts, nitre, &c.

Ne'xus. (From *necto*, to wind.) A complication of substances in one part, as the membrane which involves the fœtus.

NICHOLS, Frank, was born in London, where his father was a barrister in 1699. After passing through the usual academical exercises at Oxford with great assiduity, he chose medicine for his profession; and pursued a course of dissections with so much diligence and perseverance, as to render himself highly skilful in this branch of his art. Hence he was chosen reader of anatomy in the university, where he used his utmost endeavours to introduce a zeal for this pursuit, and obtained a high reputation. At the close of his course he made a short trial of practice in Cornwall, and subsequently paid a visit to the principal schools of France and Italy. On his return he resumed his anatomical and physiological lectures in London, which were frequented, not only by students from the universities, but also by many surgeons, apothecaries, and others. In 1728 he was chosen a fellow of the Royal Society, to which he communicated several papers; and shortly after he received his doctor's degree at Oxford, and became a fellow of the College of Physicians. In 1734 he was appointed to read the Gulstonian lectures, and chose the Heart and Circulation, for his subjects. In 1743 he married one of the daughters of the celebrated Dr. Mead. About five years after he was appointed lecturer on surgery to the college, and began his course with a learned and elegant dissertation on the "Anima Medica," which was afterwards published. On the death of Sir Hans Sloane in 1753, Dr. Nichols was appointed his successor as one of the King's physicians; which office he held till the death of his Majesty seven years after. To a second edition of the treatise "De Anima Medica," in 1772, he added a dissertation "De Motu Cordis et Sanguinis in Homine nato et non nato." Weary at length with his profession, and wishing to superintend the education of his son at Oxford, he removed to that city: and when the study of the law recalled his son to London, the doctor took a house at Epsom, where he passed the remainder of his life in literary retirement. He died in 1778.

NICKEL. It is to Cronstedt that we are indebted for the discovery of this metal; though the substance from which he extracted it was known in the year 1694. Cronstedt proved it to be a peculiar metal in the year 1751. Nickel is found in nature generally in the metallic state, more rarely in that of an oxyde. Its ores have a coppery red colour, generally covered more or less with a greenish-grey efflorescence. The most abundant ore is that termed *sulphuret of nickel*, or *kupfernickel*, which is a compound of nickel, arsenic, sulphuret of iron, and sometimes cobalt and copper. This ore occurs either massive, or disseminated, but never crystallized; it is of a copper colour, sometimes yellowish, white, or grey. It exists also combined with oxygen, and a little carbonic acid, in what is called *native oxyde of nickel* (*nickel ochre*;) it then has an earthy appearance, and is very friable; it is found coating *kupfernickel*, and seems to originate from the decomposition of this ore. It is found contaminated with iron in the mineral substance called *martial nickel*; this native combination, when fresh broken, has a lamellated texture; when exposed to the air, it soon turns black, and sometimes exhibits thin rhomboidal plates placed irregularly over each other. It is also found united to arsenic, cobalt, and alumine in the ore, called *arseniate of nickel.*

Properties. — Nickel, when free from heterogeneous substances, is of a pale flesh colour. When fresh broken, it has a strong lustre. It has a fine-grained compact texture, and can be a little flattened by hammering, similar to cast iron. It leaves a trace when rubbed upon the polished surface of a hard stone. Its specific gravity is between 8 and 9. It is magnetic like iron. Mr. Chenevix once alleged the contrary; but afterwards ascertained, that the presence of arsenic had destroyed the magnetic quality. It requires a very intense heat for fusion. When exposed for a long time to a humid atmosphere, its surface becomes gradually covered with an oxyde of a greenish hue; this takes place likewise, and more rapidly, when heated in contact with air. When fused with borax, it produces a glass of a hyacinth colour. It unites with phosphorus by fusion, and forms with it a phosphuret which is very fusible, white, and in brilliant needles. With sulphur it forms, by fusion, a hard yellow mass, with small brilliant facets. Sulphuric acid, assisted by heat, dissolves it. Nitric acid acts on it more readily. Muriatic acid, when heated on it, likewise dissolves part of it. Boracic and phosphoric acids seem to have little or no action on nickel. It readily unites with gold, and renders that metal white and brittle. It likewise fuses with platina, silver, and bismuth. It does not alloy with mercury. It is easily oxydized by the nitrate and the hyperoxymuriate of potash.

Methods of obtaining nickel. — To obtain nickel, the ore is first roasted, in order to free it from sulphur and arsenic; it is then changed into a greenish oyxde. This oxyde is mixed with two or three parts of black flux. The mixture is put into a crucible, and, being covered with decrepitated muriate of soda, it is brought to the state of fusion, by the strongest heat of a smith's forge.

When the crucible is broken, there is found at the bottom, under brown, blackish, and sometimes blue scoriæ, a button of a yellowish white colour, equal in weight to a tenth, a fifth, and even a half of the ore employed. This metal, however, is still far from being pure.

In order to purify it, the button obtained is again broken into small pieces, strongly heated, and then digested with its own weight of concentrated sulphuric acid, and distilled to dryness. The dry mass is dissolved in water, and filtered. This solution in general, deposits crystals of arsenic, and finally affords dark green crystals of sulphate of nickel. This sulphate is re-dissolved in water, and decomposed by carbonate of potash. The precipitate is dissolved in liquid ammonia; the blue solution leaves a residuum which is filtered off, and the filtered solution saturated with nitric acid. The nickel is then precipitated in the form of a greyish green powder, by carbonate of potash. From this oxyde the metallic nickel is obtainable by exposing it to heat, when made into a mass with oil and a little charcoal powder.

The following is the method of Mr. Chenevix. "Take the native sulphuret of nickel, reduce it to powder, and roast it in contact with charcoal powder over a gentle fire. When no more fumes arise, pour then nitric acid over it, and dissolve it by heat in a Florence flask. Decant the solution, filter it through bibulous paper, and evaporate it to dryness in a glass bason. Dissolve the nitrate of nickel in a sufficient quantity of distilled water, and decompose it by the addition of the strongest liquid ammonia, taking care to add it in excess. The oxyde of nickel and cobalt will thus be re-dissolved; then let the solution stand undisturbed till a precipitate again ensues. The solution must then be evaporated; it becomes blue during this process, by the precipitation of the cobalt, which should be separated, and the evaporation be then continued to dryness; the residue will be pure oxyde of nickel.

In order to reduce this oxyde to the metallic state, let it be made into a paste with oil, mix it with about three parts of black flux, and put it into a crucible, covering it with borax and muriate of soda, and heat the crucible violently for an hour and a half in a forge, a button will then be obtained, which is *pure nickel.*

Nico'phorus. (From *νικη*, victory, and *φερω*, to bear, so called because victors were crowned with it.) A kind of ivy.

NICOTIA'NA. (From Mr. Nicott, who first brought it into Europe.) Tobacco.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The former pharmacopœial name of the officinal tobacco.

Nicotia'na America'na. American or Virginian tobacco. See *Nicotiana.*

Nicotia'na mi'nor. See *Nicotiana rustica.*

Nicotia'na ru'stica. The systematic name of the English tobacco. *Nicotiana minor. Priapeia. Hyoscyamus luteus.* This plant is much weaker than the Virginian tobacco, the leaves are chiefly used to smoke vermin, though they promise, from their more gentle operation, to be a safer remedy in some cases than the former.

Nicotia′na taba′cum. The systematic name of the tobacco-plant. *Petum*, by the Indians, *Tabacum*. *Hyoscyamus Peruvianus*. *Picelt*. The Virginian tobacco. *Nicotiana tabacum; foliis lanceolato-ovatis sessilibus decurrentibus florentibus acutis*, of Linnæus, is the plant employed medicinally. It is a very active narcotic and sternutatory. A decoction of the leaves is much esteemed in some diseases of the skin, and is by some said to be a specific against the itch. The fumes and the decoction are employed in obstinate constipations of the bowels, and very frequently with success; it is necessary, however, to caution the practitioner against an effect mostly produced by its exhibition, namely, syncope, with cold sweats; and, in some instances, death.

NIGE′LLA. (*Quasi nigrella*, from *niger*, black, so named from its black seed.)

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria*. Order, *Pentagynia*.

2. The pharmacopœial name of the plant called, devil in a bush, or fennel-flower.

Nige′lla sati′va. The systematic name of the devil in a bush. It was formerly employed medicinally as an expectorant and deobstruent, but is now deservedly fallen into disuse.

Nigella′strum. (From *Nigella*, fennel-flower.) *Pseudomelanthium*. *Lychnis segetum major*. *Gethago*. *Nigella officinarum*. *Lychnoides segetum*. Cockle, a herb resembling the nigella.

Night-blindness. See *Nyctalopia*.

NIGHT-MARE. *Incubus*. *Oneirodynia gravans*. The nervous or indisposed persons are oppressed during sleep with a heavy pressing sensation on the chest, by which respiration is impeded, or the circulation of blood intercepted, to such a degree as to threaten suffocation. Frightful ideas are recollected on waking, which occupied the dreaming mind. Frequent attempts are made to *cry out*, but often without effect, and the horrors and agitations felt by the patient are inexpressibly frightful. The sensations generally originate in a large quantity of wind, or indigestible matter in the stomach of *supper-eaters*, which, pressing the stomach against the diaphragm, impede respiration, or render it short and convulsed. Inflated intestines may likewise produce similar effects, or mental perturbations.

There is another species of night-mare mentioned by authors, which has a more dangerous tendency; and this arises from an impeded circulation of blood in the lungs, when lying down, or too great relaxation of the heart and its impelling powers. Epilepsy, apoplexy, or sudden death, are sometimes amongst the consequences of this species of disturbed sleep. Polypi in the large vessels, aneurisms, water in the pleura, pericardium, or lungs, empyema, &c. are amongst the most dangerous causes. See *Oneirodynia*.

Nightshade, American. See *Phytolacca decandria*.

Nightshade, deadly. See *Atropa belladonna*.

Nightshade, garden. See *Solanum nigrum*.

Nightshade, Palestine. See *Solanum sanctum*.

Nightshade, woody. See *Solanum dulcamara*.

Nigri′ties. (From *niger*, black.) A caries is called *nigrities ossium*, a blackness of the bone.

Ni′hilum a′lbum. A name formerly given to the flowers, or oxyde of zinc.

Ni′nzi ra′dix. See *Sium ninsi*.

Ni′nzin. See *Sium ninsi*.

NIPPLE. The small projecting portion in the middle of the breasts of men and women. It is much larger in the latter, and has several openings in it, the excretory ducts of the lacteal glands.

Nipple-wort. See *Lapsana*.

NI′TRAS. (From *nitrum*, nitre.) A nitrate; a salt formed by the union of the nitric acid and different bases, as the nitrate of potash, soda, silver, &c.

Ni′tras ammo′niæ. *Alkali volatile nitratum*. *Sal ammoniacus nitrosus*. *Ammonia nitrata*. A salt composed of the acid of nitre and ammonia, the virtues of which are irritating, diuretic, and deobstruent; externally, it is resolvent and sialagogue.

Ni′tras arge′nti. See *Argenti nitras*.

Ni′tras pota′ssæ. See *Nitre*.

Ni′tras pota′ssæ fu′sus. *Sal prunellæ*. *Nitrum tabulatum*. This salt, besides the nitric acid and potash, contains a little sulphuric acid.

Ni′tras so′dæ. *Alkali minerale nitratum*. *Nitrum cubicum*. Its virtues are similar to those of nitrate of potash, for which it may be safely substituted.

Nitrate of potash. See *Nitre*.

Nitrate of silver. See *Argenti nitras*.

NITRE. *νιτρον*. *Nitrum*. *Potassæ nitras*. *Salpetræ*. *Alaurat*. *Algali*. *Atac*. *Baurack*. *Acusto*. *Halinitrum*. Salt petre. A perfect neutral salt, formed by the union of the nitric acid with the vegetable alkali, thence called nitrate of potash. Its taste is cooling, and it does not alter the colour of the syrup of violets. Nitre exists in large quantities in the earth, and is continually formed in inhabited places; it is found in great quantities upon walls which are sheltered from the rain. It is of great use in the arts; it is the principal ingredient in gunpowder; and, burned with different proportions of tartar, forms the substances called fluxes. It is of considerable importance in medicine, as a febrifuge, diuretic, and antiphlogistic remedy, in doses of from five to twenty grains.

NITRIC ACID. *Acidum nitricum.* The London College directs this acid to be made by distilling equal parts, by weight, of dried nitrate of potash and sulphuric acid. We are directed to take two pounds of each, mix them in a glass retort, then distil the nitric acid in a sand-bath, as long as a red vapour arises; lastly, having added to the acid first distilled an ounce more of dry nitrate of potash, distil the nitric acid again in a similar manner.

The specific gravity of nitric acid is to that of water, as 1.500 to 1.000. A fluid ounce, diluted with water, ought to dissolve of a lump of lime-stone immersed therein one ounce.

This acid, undiluted, is a powerful caustic, and is sometimes employed as such by surgeons to destroy fungous excrescences. Very much diluted, it is exhibited internally as a tonic and antiseptic in the cure of typhoid fevers, scurvy, syphiloid diseases, and other cachexies.

Nitric oxyde of Mercury. See *Hydrargyri nitrico-oxydum.*

NITRICO-O'XYDUM HYDRA'RGYRI. See *Hydrargyri nitrico-oxydum.*

NITROGEN. (From *νιτρον*, nitre, and *γενναω*, to generate; so called because it is the generator of nitre.) Azote. Alkaligen. A simple body, very abundant in nature, though not producible alone, or in an insulated state. It is not distinctly perceptible to the human senses, however aided by instruments. We know it only in its combination. But the reality of its existence is unquestionable; since we can mark its passage out of one combination into another; since we know the laws of chemical attraction to which it is subject; since we discern the precise character of those simple substances with which it is combinable, and can distinguish the nature of the new compounds which the combination produces. The separate existence and peculiar nature of this substance were first discovered by Dr. Rutherford. It is the radical principle of our atmospheric air, and some other gaseous substances, and forms a constituent part of animal and many vegetable substances. It is a component part of the nitric acid, and of ammonia. It has been considered as an alkalizing principle, in opposition to oxygen, which, as we have noticed before, is the principle of acidity. One of the most remarkable combinations into which nitrogen is known to enter, is that which takes place between it and light and caloric. The compound thus produced is called.

NITROGEN GAS.

Phlogisticated air. Azotic gas. Mephitic air. Mofette.

Properties.—Nitrogen gas, or azotic gas, as it is also called, is not possessed of any remarkable property capable of characterizing it; but is principally distinguished by certain negative qualities, namely, it is extremely hurtful to respiration, and quickly kills animals. Plants thrive and even flourish in it. It has no sensible taste. It neither reddens blue vegetable colours, nor precipitates lime, or barytic-water. Its weight is to common air, as about .972 to 1.000. No combustible substance burns in nitrogen gas; but it is capable of an imperfect combustion in combination with oxygen gas when exposed to the action of the electric spark. It is not absorbable by water. It is capable of dissolving sulphur, phosphorus, and charcoal in minute quantities. It unites to hydrogen under certain conditions, and constitutes with it ammonia. When united to oxygen in different proportions, it produces atmospheric air, gaseous oxyde of azote or nitrogen, nitrous gas, nitrous acid, and nitric acid. It is a component part of all animal substances, and communicates to them their most distinctive characters. It was discovered by Dr. Rutherford, of Edinburgh.

Nitrogen gas has been found by Priestley in the Bath waters, and by Dr. Pearson in the Buxton waters.

Methods of obtaining Nitrogen Gas.—Nitrogen gas may be obtained by various means. For instance, it has been long since ascertained that air, which has served the purposes of combustion and respiration, is no longer proper for these uses. Chemists have availed themselves of this circumstance in order to obtain nitrogen gas in the following manner.

1. Make a quantity of sulphuret of potash, or sulphuret of iron, into a paste with water, and place the mixture in a saucer or plate over water, on a stand raised above the fluid; then invert over it a jar or bell-glass, and allow this to stand for a few days. The air contained in the bell-glass will gradually diminish, as will appear from the ascent of the water, until only about three-fourths of its original bulk remain.

When no further diminution takes place, the vessel containing the sulphuret must be removed, and the remaining air will be found to be nitrogen gas.

In this experiment, the moistened sulphuret of potash or iron has a great affinity to oxygen; it attracts and separates it from the atmospheric air, and the nitrogen gas is left behind; the sulphur is, during the experiment, converted into sulphuric acid, which unites to the alkali, and forms sulphate of potash; or where sulphuret of iron is used, the metal being oxydized at the same time, sulphate of iron is formed. The water with which the sulphuret is moistened likewise undergoes a decomposition. See *Eudiometry.*

2. Nitrogen gas may likewise be obtained

from fresh animal substances. For this purpose, cut a piece of lean muscular flesh into small pieces, introduce them into a retort, and pour over them weak nitric acid. If the heat of a lamp be then gently applied, the gas will be speedily obtained; for all animal substances are composed of nitrogen, with carbon, hydrogen, or oxygen; and on adding nitric acid in this way, the equilibrium of the respective affinities is destroyed, the nitrogen gas becoming separated.

The fibrous part of animal matter is that which affords the most nitrogen gas; next to this all the concretive parts, such as the clot of blood; next to that albuminous matter, such as the serum and the white of eggs; gelatinous substances afford the least.

3. Nitrogen gas may likewise be obtained by causing oxymuriatic acid gas to be received in a vessel containing liquid ammonia; for ammonia consists of hydrogen and nitrogen. The hydrogen of the ammonia unites to the oxygen of the oxymuriatic acid, and forms water, heat is evolved, the nitrogen becomes free, and the oxymuriatic acid becomes converted into simple muriatic acid.

NITROGEN, GASEOUS OXYDE OF. This combination of nitrogen and oxygen was formerly called the dephlogisticated nitrous gas, but now gaseous oxyde of nitrogen or nitrous oxyde. It was first discovered by Priestley. Its nature and properties have since been investigated (though not very accurately) by a society of Dutch chemists.

Professor Davy has examined with uncommon accuracy the formation and properties of all the substances concerned in its production. He has detected the sources of error in the experiments of Priestley, and the Dutch chemists, and to him we are indebted for a thorough knowledge of this gas. We shall, therefore, exhibit the philosophy of this gazeous fluid as we find it in his researches concerning the nitrous oxyde.

Properties.—It exists in the form of a permanent gas. A candle burns with a brilliant flame and crackling noise in it; before its extinction the white inner flame becomes surrounded with a blue one. Phosphorus introduced into it, in a state of *actual* inflammation, burns with increased splendour, as in oxygen gas. Sulphur introduced into it when burning with a feeble blue flame is instantly extinguished; but when in a state of *vivid inflammation,* it burns with a rose-coloured flame. Ignited charcoal burns in it more brilliantly than in atmospheric air. Iron wire, with a small piece of wood affixed to it, when inflamed, and introduced into a vessel filled with this gas, burns vehemently, and throws out bright scintillating sparks. No combustible body, however, burns in it, unless it be previously brought to a state of vivid inflammation. Hence sulphur may be melted, and even sublimed in it, phosphorus may be liquefied in it without undergoing combustion. Nitrous oxyde is pretty rapidly absorbed by water that has been boiled; a quantity of gas equal to rather more than half the bulk of the water may be thus made to disappear, the water acquires a sweetish taste, but its other properties do not differ perceptibly from common water. The whole of the gas may be expelled again by heat. It does not change blue vegetable colours. It has a distinctly sweet taste, and a faint but agreeable odour. It undergoes no diminution when mingled with oxygen or nitrous gas. Most of the liquid inflammable bodies, such as ether, alcohol, volatile and fat oils, absorb it rapidly and in great quantity. Acids exert but little action on it. The affinity of the neutro-saline solutions for gaseous oxyde of nitrogen is very feeble. Green muriate and green sulphate of iron, whether holding nitrous gas in solution, or not, do not act upon it. None of the gases when mingled with it, suffer any perceptible change at common temperatures; the muriatic and sulphurous acid gases excepted, which undergo a slight expansion. Alkalis freed from carbonic acid, exposed in the dry or solid form, have no action upon it; they may, however, be made to combine with it in the nascent state, and then constitute *saline compounds* of a peculiar nature. These combinations deflagrate when heated with charcoal, and are decomposed by acids; the gaseous oxyde of nitrogen being disengaged. It undergoes no change whatever from the simple effect of light. The action of the electric spark, for a long while continued, converts it into a gas, analogous to atmospheric air and nitrous acid; the same is the case when it is made to pass through an ignited earthen tube. It explodes with hydrogen in a variety of proportions, at very high temperatures; for instance, when electric sparks are made to pass through the mixture. Sulphuretted, heavy, and light carburetted hydrogen gases, and gaseous oxide of carbon likewise burn with it when a strong red heat is applied. 100 parts by weight of nitrous oxyde, contain 36.7 of oxygen and 63.3 of nitrogen; 100 cubic inches weigh 50 grains at 55° temperature and 30 inches atmospheric pressure. Animals, when wholly confined in gaseous oxyde of nitrogen, give no signs of uneasiness for some moments, but they soon become restless and then die. When gaseous oxyde of nitrogen is mingled with atmospheric air, and then received into the lungs, it generates highly pleasurable sensations; the effects it produces on the animal system are eminently distinguished from every other chemical agent. It excites every fibre to action, and rouses the faculties of the mind, inducing a state of great exhilaration, an irresistible propensity to laughter, a rapid flow of vivid ideas, and unusual vigour and fitness for muscular exertions, in some respects resembling those attendant on the pleasantest period of intoxication, without any subsequent languor, depression of the nervous energy, or disagreeable feelings; but more generally followed by vigour, and a pleasurable disposition to exertion, which gradually subsides.

Such are the properties that characterise the nitrous oxyde.

The Dutch chemists and some French and German philosophers assert that it cannot be respired; that burning phosphorus, sulphur, and charcoal are extinguished in it, &c. It is probable they did not examine it in a state of purity, for it is otherwise difficult to account for these and many other erroneous opinions.

Methods of obtaining gaseous oxyde of nitrogen. — Gaseous oxyde of nitrogen is produced, when substances, having a strong affinity with oxygen are brought into contact with nitric acid, or with nitrous gas. It may therefore be obtained by various processes, in which nitrous gas or nitric acid is decomposed by substances capable of attracting the greater part of their oxygen. The most commodious and expeditious as well as cheapest mode of obtaining it, is by decomposing nitrate of ammonia, *at a certain temperature*, in the following manner: —

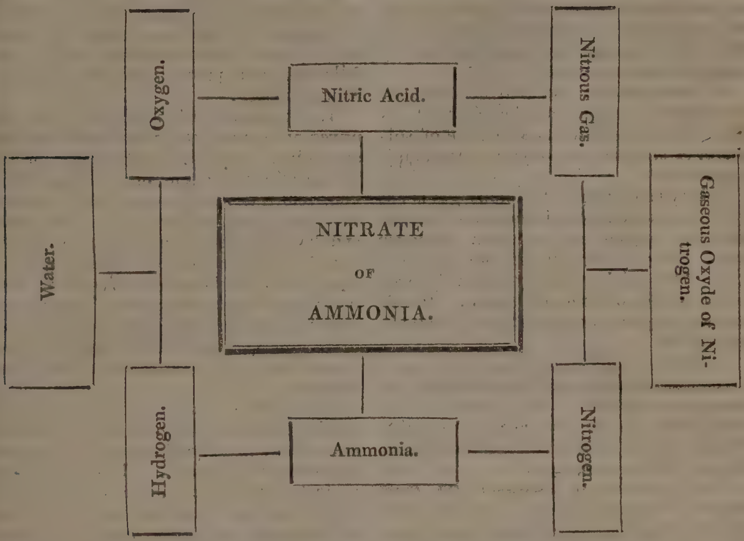
1. Introduce into a glass retort some pure nitrate of ammonia, and apply the heat of an Argand's lamp, the salt will soon liquefy, and, when it begins to boil, gas will be evolved. Increase the heat gradually till the body and neck of the retort become filled with a semi-transparent milky white vapour. In this state the temperature of the fused nitrate is between 340° and 480°. After the decomposition has proceeded for a few minutes, so that the gas evolved quickly enlarges the flame of a taper held near the orifice of the retort, it may be collected over water, care being taken during the whole process, never to suffer the temperature of the fused nitrate to rise above 500° Fahr. which may easily be judged of, from the density of the vapours in the retort, and from the quiet ebullition of the fused nitrate; for if the heat be increased beyond this point, the vapours in the retort acquire a reddish and more transparent appearance; and the fused nitrate begins to rise, and occupy twice the bulk it did before. The nitrous oxyde, after its generation, is allowed to stand over water, for at least six hours, and is then fit for respiration or other experiments.

Explanation. — Nitrate of ammonia consists of nitric acid and ammonia; nitric acid is composed of nitrous gas and oxygen: and ammonia consists of hydrogen and nitrogen. At a temperature of about 480° the attractions of hydrogen for nitrogen in ammonia, and that of nitrous gas for oxygen in nitric acid, are *diminished*: while, on the contrary, the attractions of the hydrogen of ammonia for the oxygen of the nitric acid, and that of the nitrogen of the ammonia for the nitrous gas of the nitric acid, are *increased*; hence all the former affinities are broken, and new ones produced, namely, the hydrogen of the ammonia attracts the oxygen of the nitric acid, the result of which is *water*; the nitrogen of the ammonia combines with the liberated nitrous gas, and forms *nitrous oxyde*. The water and nitrous oxyde produced, probably exist in biniary combination in the aëriform state, at the temperature of the decomposition.

Such is the philosophy of the production of gaseous oxyde of nitrogen, by decomposing nitrate of ammonia at that temperature, given by Davy.

To illustrate this complicated play of affinity more fully, the following sketch may not be deemed superfluous.

A Diagram exhibiting the production of Gaseous Oxyde of Nitrogen, by decomposing Nitrate of Ammonia, at 480° *Fahr.*



Professor Davy has likewise pointed out, that, when the heat employed for decomposing nitrate of ammonia is raised above the before-stated temperature, another play of affinities takes place, the attractions of nitrogen and hydrogen for each other and of oxygen for nitrous gas are still more diminished, whilst that of nitrogen for nitrous gas is totally destroyed, and that of hydrogen for oxygen increased to a greater extent. A new attraction likewise takes place, namely, that of nitrous gas for nitric acid to form *nitrous acid vapour*, and a new arrangement of principles is rapidly produced: the nitrogen of the ammonia having no affinity for any of the single principles at this temperature, enters into no binary compound; the oxygen of the nitric acid forms water with the hydrogen, and the nitrous gas combines with the nitric acid to form *nitrous acid vapour*.

All these substances most probably exist in combination, at the temperature of their production; and at a lower temperature assume the form of *nitrous acid*, *nitrous gas*, *nitrogen*, and *water*; and hence we see the necessity of not heating the nitrate of ammonia above the before-stated temperature.

On account of the rapid absorption of gazeous oxyde of nitrogen by water, it is economical to preserve the fluid which has been used to confine this gas, and to make use of it for collecting other quantities of it. In order to hasten its production, the nitrate of ammonia may be previously freed from its water of crystallization by gently fusing it in a glass or Wedgwood's bason for a few minutes, and then keeping it for use in a well-stopped bottle.

2. Nitrous oxyde may likewise be obtained by exposing common nitrous gas to alkaline sulphites, particularly to sulphite of potash containing its full quantity of water of crystallization. The nitrous oxyde produced from nitrous gas by sulphite of potash has all the properties of that generated from the decomposition of nitrate of ammonia.

The conversion of nitrous gas into nitrous oxyde, by these bodies, depends on the abstraction of a portion of its oxygen by the greater affinity of the sulphite presented to it. The nitrogen and remaining oxygen assume a more condensed state of existence, and constitute nitrous oxyde.

3. Nitrous oxyde may also be obtained by mingling together nitrous gas and sulphuretted hydrogen gas. The volume of gases in this case is diminished, sulphur deposited, ammonia, water, and nitrous oxyde are formed.

The change of principles which takes place in this experiment depends upon the combination of the hydrogen of the sulphuretted hydrogen gas, with different portions of the oxygen and nitrogen of the nitrous gas, to form water and ammonia, while it deposits sulphur. The remaining oxygen and nitrogen being left in due proportion constitute nitrous oxyde.

Remark.— This singular exertion of attraction by a simple body appears highly improbable *a priori*; but the formation of ammonia, and the non-oxygenation of the sulphur, elucidate the fact. In performing this experiment care should be taken that the gases should be rendered as dry as possible; for the presence of water considerably retards the decomposition.

4. Nitrous oxyde may also be produced by presenting alkaline sulphurets to nitrous gas. Davy observed that a solution of sulphuret of strontian, or barytes, answers this purpose best.

This decomposition of nitrous gas is not solely produced by the abstraction of oxygen from the nitrous gas, to form sulphuric acid. It depends equally on the decomposition of the sulphuretted hydrogen dissolved in the solution or liberated from it. In this process, sulphur is deposited and sulphuric acid formed.

5. Nitrous oxyde is obtained in many circumstances similar to those in which nitrous gas is produced. Dr. Priestley found that nitrous oxyde was evolved, together with nitrous gas, during the solution of iron, tin, and zinc in nitric acid.

It is difficult to ascertain the exact rationale of these processes, for very complicated agencies of affinities take place. Either the nascent hydrogen arising from the decomposition of the water by the metallic substance may combine with portions of the oxygen and nitrogen of the nitrous gas; and thus by forming water and ammonia, convert it into nitrous oxyde; or the metallic substance may attract at the same time oxygen from the water and nitrous gas, whilst the nascent hydrogen of the water seizes upon a portion of the nitrogen of the nitrous gas, to form ammonia. The analogy between this process and the decomposition of nitrous gas by sulphuretted hydrogen, renders the first opinion most probable.

Such are the principal methods of obtaining nitrous oxyde. There are no reasons, Davy thinks, for supposing that nitrous oxyde is formed in any of the processes of nature, and the nice equilibrium of affinity by which it is constituted forbids us to hope for the power of composing it from its simple principles. We must be content to produce it artificially.

NITRO-MURIATIC ACID. The compound acid formed by uniting the nitric and muriatic acids. It is commonly known by the name of aqua regia. See *Oxy-muriatic acid.*

NITROUS ACID. This name has usually been given to nitric acid, impregnated with nitrous gas, to which it owes its colour; for pure nitric acid is colourless.

The common mode of obtaining nitrous acid is to decompose nitrate of potash by means of sulphuric acid with the assistance of heat. The nitric acid suffers a partial decomposition during the process, and hence it is the nitrous acid which is obtained in the first process of distillation.

It seems to be true that nitrous acid of a much darker orange red colour is obtained by decomposing nitrate of potash by means of sulphate of iron, than when the same salt is decomposed by sulphuric acid. The following is the process made use of by some manufacturers:—

Take a quantity of sulphate of iron, deprived of its water of crystallization by heat, and mix it with an equal weight of dry nitrate of potash; put the mixture into a glass retort, to which a very spacious receiver has been luted, containing a little water, and begin the distillation with a very slow fire. As soon as the red vapours cease to come over, let the fire be slackened, and, when the vessels are cooled, the receiver may be cautiously withdrawn, and its contents quickly transferred through a glass funnel into a bottle, furnished with a ground stopper.

NITROUS GAS. The name of nitrous gas is given to an aëriform fluid, consisting of a certain quantity of nitrogen and oxygen, combined with caloric. It is an elastic, colourless fluid, having no sensible taste; it is neither acid nor alkaline; it is exceedingly hurtful to animals, producing instant suffocation whenever they attempt to breathe it. The greater number of combustible bodies refuse to burn in it. It is nevertheless capable of supporting the combustion of some of these bodies. Phosphorus burns in nitrous gas when introduced into it in a state of inflammation; pyrophorus takes fire in it spontaneously.

It is not decomposable by water, though 100 cubic inches of this fluid, when freed from air, absorb about five cubic inches of the gas. This solution is void of taste; it does not redden blue vegetable colours; the gas is expelled again when the water is made to boil or suffered to freeze. Nitrous gas has no action on nitrogen gas even when assisted by heat. It is decomposed by several metals at high temperatures.

Its specific gravity, when perfectly pure, is to that of atmospheric air as about 1.04 to 1.

Ardent spirits, saccharine matters, hydrocarbonates, sulphurous acid, and phosphorus have no action on it at the common temperature. It is not sensibly changed by the action of light. Heat dilates it. It rapidly combines with oxygen gas at common temperatures, and converts it into nitrous acid. Atmospheric air produces the same effect but with less intensity. It is absorbable by green sulphate, muriate and nitrate of iron, and decomposable by alkaline, terrene, and metallic sulphurets, and other bodies that have a strong affinity for oxygen; but it is not capable of combining with them chemically, so as to form saline compounds. From the greatest number of bodies which absorb it, it may be again expelled by the application of heat.

It communicates to flame a greenish colour before extinguishing it; when mixed with hydrogen gas this acquires the property of burning with a green flame. It is absorbable by nitric acid and renders it fuming.

When exposed to the action of caloric in an ignited porcelain tube, it experiences no alteration, but when electric sparks are made to pass through it, it is decomposed and converted into nitrous acid, and nitrogen gas. Phosphorus does not shine in it. It is composed of about eight parts of oxygen and seven of nitrogen.

Methods of obtaining nitrous gas. — 1. Put into a small proof, or retort, some copper wire or pieces of the same metal, and pour on it nitric acid of commerce diluted with water, an effervescence takes place and nitrous gas will be produced. After having suffered the first portions to escape on account of the atmospheric air contained in the retort, collect the gas in the water-apparatus as usual. In order to obtain the gas in a pure state, it must then be shook for some time in contact with water. The water in this instance suffers no alteration, on the contrary, the acid undergoes a partial decomposition; the metal robs some of the nitric acid of the greatest part of its oxygen and becomes oxydized; the acid having lost so much of its oxygen, becomes thereby so altered, that at the usual temperature it can exist no longer in the liquid state, but instantly expands and assumes the form of gas; ceasing at the same time to act as an acid, [and exhibiting different properties: but the acid remaining undecomposed combines with the oxyde of copper, and forms nitrate of copper.

Instead of presenting copper to nitric acid, iron, zinc, mercury, or silver may be made use of. The metals best suited for the production of nitrous gas are silver, mercury, and copper.

2. Nitrous gas may likewise be obtained by synthesis. This method of obtaining it we owe to Dr. Milner of Cambridge.

Into the middle of an earthen tube about 20 inches long and three-fourths of an inch wide, open at both ends, put as much coarsely-powdered manganese as is sufficient nearly to fill it. Let this tube traverse a furnace having two openings opposite to each other. To one end of the tube lute a retort containing water strongly impregnated with ammonia, and to the other adapt a bent glass tube which passes into the pneumatic trough. Let a fire be kindled in the furnace, and when the manganese may be supposed to be red hot, apply a gentle heat to the retort and drive over it the vapour of the ammonia; the consequence will be that nitrous gas will be delivered at the farther end of the tube, while the ammonia enters the other end; and this effect does not take place without the presence of the alkali.

Explanation. — Ammonia consists of hydrogen and nitrogen, its hydrogen combines with the oxygen which is given out by the ignited manganese, and forms water, its nitrogen unites at the same time to another portion of the oxygen and constitutes the nitrous gas.

There is a cause of deception in this experiment, against which the operator ought to be on his guard, lest he should conclude no nitrous gas is formed, when, in reality, there is a considerable quantity. The ammonia, notwithstanding every precaution, will frequently pass over undecomposed. If the receiver in the pneumatic trough is filled with water, great part of this will indeed be presently absorbed; but still some portion of it will mix with the nitrous gas formed in the process. Upon admitting the atmospheric air, the nitrous gas will become decomposed, and the red nitrous fumes instantly unite with the alkali. The receiver is presently filled with white clouds of nitrate of ammonia; and in this manner a wrong conclusion may easily be drawn from the want of the orange colour of the nitrous fumes. A considerable quantity of nitrous gas may have been formed, and yet no orange colour appear, owing to this circumstance; and therefore it is easy to understand how a small quantity of nitrous gas may be most effectually disguised by the same cause.

Dr. Milner also obtained nitrous gas, by passing ammonaical gas over sulphate of iron deprived of its water of crystallization.

Nitrous oxide. See *Nitrogen, gazeous oxide of.*

Ni′trum. This name was anciently given to natron, but in modern times to nitrate of potash. See *Nitre.*

Ni′trum purifica′tum. See *Nitre.*

Ni′trum vitriola′tum. Sulphuric acid and soda. See *Sodæ sulphas.*

No′bilis. (*Quasi noscibilis*, from *nosco*, to know.) A valve of the heart, by way of eminence, is called *nobilis valvula*, the noble valve.

Noble metals. A name formerly bestowed on the perfect metals, gold, silver, and platina.

Noctambula′tio. (From *nox*, night, and *ambulo*, to walk.) *Noctisurgium.* Walking in the night, when asleep. See *Oneirodynia.*

Noctisu′rgium. See *Noctambulatio.*

Nocturnal emissions. See *Gonorrhœa dormientium.*

Nodding cnicus. The systematic name of this plant is *Cnicus cernuus*, of Linnæus. In Siberia the tender stalks are first peeled and then boiled and eaten by the inhabitants.

NODE. *Nodus.* A hard circumscribed tumour, proceeding from a bone, and caused by a swelling of the periosteum; they appear on every part of the body, but are more common on such as are thinly covered with muscles, as the os frontis, fore-part of the tibia, radius and ulna. As they increase in size they become more painful from the distention they occasion in the periosteum. When they continue long the bone becomes completely carious.

Nodus. (From *Anad*, to tie, Heb.) A node or swelling upon a bone. See *Node.*

No'li me ta'ngere. A species of herpes affecting the skin and cartilages of the nose, very difficult to cure, because it is exasperated by most applications. The disease generally commences with small, superficial spreading ulcerations on the alæ of the nose, which become more or less concealed beneath furfuraceous scabs. The whole nose is frequently destroyed by the progressive ravages of this peculiar disorder, which sometimes cannot be stopped or retarded by any treatment, external or internal.

No'mæ. (From *νεμω*, to eat.) *Noma.* Ulcers that sometimes attack the cheek or vulva of young girls. They appear in the form of red and somewhat livid spots; are not attended with pyrexia, pain, or tumour, and in a few days become gangrenous.

NON-NATURALS. Under this term, antient physicians comprehend air, meat and drink, sleep and watching, motion and rest, the retentions and excretions, and the affections of the mind; or, in other words, those principal matters which do not enter into the composition of the body, but at the same time are necessary to its existence.

No'nus. (*Quasi novenus*, from *novem*, nine.) *Humeri musculus placentini.* The ninth or coracoid muscle of the shoulder.

No'pal. *Nopalnochetzth.* The plant that feeds the cochineal insect.

Norla'ndicæ ba'ccæ. See *Rubus arcticus.*

NOSE. *Nasus.* See *Nares.*

Nose, bleeding of. See *Epistaxis.*

Nosoco'mium. (From *νοσος*, a disease, and *κομεω*, to take care of.) *Nosodochium.* An hospital.

Nosodo'chium. See *Nosocomium.*

NOSOLOGY. (*Nosologia*, from *νοσος*, a disease, and *λογος*, a discourse.) The doctrine of the names of diseases. Modern physicians understand by nosology the arrangement of diseases in classes, orders, genera, species, &c. The following are the approved arrangements of the several nosologists. That of Dr. Cullen is generally adopted in this country, and next to it the arrangement of Sauvages.

Synoptical View of the Classes, Orders, and Genera, according to the Cullenian *System.*

CLASS I.—PYREXIÆ.

Order I.
FEBRES.
§ 1. *Intermittentes.*
1. Tertiana
2. Quartana
3. Quotidiana.
§ 2. *Continuæ.*
4. Synocha
5. Typhus
6. Synochus.
Order II.
PHLEGMASIÆ.
7. Phlogosis
8. Ophthalmia
9. Phrenitis
10. Cynanche
11. Pneumonia.
12. Carditis.
13. Peritonitis
14. Gastritis
15. Enteritis
16. Hepatitis
17. Splenitis
18. Nephritis
19. Cystitis
20. Hysteritis
21. Rheumatismus
22. Odontalgia
23. Podagra
24. Arthropuosis.
Order III.
EXANTHEMATA.
25. Variola
26. Varicella
27. Rubeola
28. Scarlatina
29. Pestis
30. Erysipelas
31. Miliaria
32. Urticaria
33. Pemphigus
34. Aphtha.
Order IV.
HÆMORRHAGIÆ.
35. Epistaxis
36. Hæmoptysis
37. Hæmorrhois'
38. Menorrhagia.
Order V.
PROFLUVIA.
39. Catarrhus
40. Dysenteria.

CLASS II.—NEUROSES.

Order I.
COMATA.
41. Apoplexia
42. Paralysis
Order II.
ADYNAMIÆ.
43. Syncope
44. Dyspepsia
45. Hypochondriasis
46. Chlorosis.
Order III.
SPASMI.
47. Tetanus
48. Convulsio
49. Chorea
50. Raphania
51. Epilepsia
52. Palpitatio
53. Asthma
54. Dyspnœa
55. Pertussis
56. Pyrosis
57. Colica
58. Cholera
59. Diarrhœa
60. Diabetes
61. Hysteria
62. Hydrophobia.
Order IV.
VESANIÆ.
63. Amentia
64. Melancholia
65. Mania
66. Oneirodynia.

CLASS III.—CACHEXIÆ.

Order I.
MARCORES.
67. Tabes
68. Atrophia.

Order II.
INTUMESCENTIÆ.
§ 1. *Adiposæ.*
69. Polysarcia.
§ 2. *Flatuosæ.*
70. Pneumatosis
71. Tympanites.
72. Physometra.
§ 3. *Aquosæ.*
73. Anasarca
74. Hydrocephalus
75. Hydrorachitis
76. Hydrothorax
77. Ascites
78. Hydrometra
79. Hydrocele.
§ 4. *Solidæ.*
80. Physconia
81. Rachitis.

Order III.
IMPETIGINES.
82. Scrophula
83. Syphilis
84. Scorbutus
85. Elephantiasis
86. Lepra
87. Frambæsia
88. Trichoma
89. Icterus.

CLASS IV.—LOCALES.

Order I.
DYSÆSTHESIÆ.
90. Caligo
91. Amaurosis
92. Dysopia
93. Pseudoblepsis
94. Dysecoea
95. Paracusis
96. Anosmia
97. Agheustia
98. Anæsthesia.

Order II.
DYSOREXIÆ.
§ 1. *Appetitus erronei.*
99. Bulimia
100. Polydipsia
101. Pica
102. Satyriasis
103. Nymphomania
104. Nostalgia
§ 2. *Appetitus deficientes.*
105. Anorexia
106. Adipsia
107. Anaphrodisia.

Order III.
DYSCINESIÆ.
108. Aphonia
109. Mutitas
110. Paraphonia
111. Psellismus
112. Strabismus
113. Dysphagia
114. Contractura.

Order IV.
APOCENOSES.
115. Profusio
116. Ephidrosis
117. Epiphora
118. Ptyalismus
119. Enuresis
120. Gonorrhœa.

Order V.
EPISCHESES.
121. Obstipatio
122. Ischuria
123. Dysuria
124. Dyspermatismus
125. Amenorrhœa.

Order VI.
TUMORES.
126. Aneurisma
127. Varix
128. Ecchymoma
129. Schirrus
130. Cancer
131. Bubo
132. Sarcoma
133. Verruca
134. Clavus
135. Lupia.
136. Ganglion
137. Hydatis
138. Hydarthrus
139. Exostosis.

Order VII.
ECTOPIÆ.
140. Hernia
141. Prolapsus
142. Luxatio.

Order VIII.
DYALYSES.
143. Vulnus
144. Ulcus
145. Herpes
146. Tinea
147. Psora
148. Fractura
149. Caries.

Synoptical View of the System of Sauvages.

CLASS I.—VITIA.

Order I.
MACULÆ.
Genus 1. Leucoma
2. Vitiligo
3. Ephelis
4. Gutta rosea
5. Nævus
6. Ecchymoma.

Order II.
EFFLORESCENTIÆ.
7. Herpes
8. Epinyctis
9. Psydracia
10. Hidroa.

Order III.
PHYMATA.
11. Erythema
12. Œdema
13. Emphysema
14. Scirrhus
15. Phlegmone
16. Bubo
17. Parotis
18. Furunculus
19. Anthrax
20. Cancer
21. Paronychia
22. Phimosis.

Order IV.
EXCRESCENTIÆ.
23. Sarcoma
24. Condyloma
25. Verruca
26. Pterygium
27. Hordeolum
28. Bronchocele
29. Exostosis
30. Gibbositas
31. Lordosis.

Order V.
CYSTIDES.
32. Aneurisma
33. Varix
34. Hydatis
35. Marisca
36. Staphyloma
37. Lupia
38. Hydarthrus
39. Apostema
40. Exomphalus
41. Oscheocele.

Order VI.
ECTOPIÆ.
42. Exophthalmia
43. Blepharoptosis
44. Hypostaphyle
45. Paraglossa.
46. Proptoma
47. Exania
48. Exocyste
49. Hysteroptosis
50. Enterocele
51. Epiplocele

52. Gasterocele
53. Hepatocele
54. Splenocele
55. Hysterocele
56. Cystocele
57. Encephalocele
58. Hysteroloxia
59. Parorchidium
60. Exarthrema
61. Diastasis
62. Laxarthrus.

Order VII.
PLAGÆ.

63. Vulnus
64. Punctura
65. Excoriatio
66. Contusio
67. Fractura
68. Fissura
69. Ruptura
70. Amputatura
71. Ulcus
72. Exulceratio
73. Sinus
74. Fistula
75. Rhagas
76. Eschara
77. Caries
78. Arthrocace.

CLASS II.—FEBRES.

Order I.
CONTINUÆ.

79. Ephemera
80. Synocha
81. Synochus
82. Typhus
83. Hectica.

Order II.
REMITTENTES.

84. Amphimerina
85. Tritæophya
86. Tetartophya.

Order III.
INTERMITTENTES.

87. Quotidiana
88. Tertiana
89. Quartana
90. Erratica.

CLASS III.—PHLEGMASIÆ.

Order I.
EXAMTHEMATICÆ.

91. Pestis
92. Variola
93. Pemphigus
94. Rubeola
95. Miliaris
96. Purpura
97. Erysipelas
98. Scarlatina
99. Essera
100. Aphtha.

Order II.
MEMBRANACEÆ.

101. Phrenitis
102. Paraphrenesis
103. Pleuritis
104. Gastritis
105. Enteritis
106. Epiploitis
107. Metritis
108. Cystitis.

Order III.
PARENCHYMATOSÆ.

109. Cephalitis
110. Cynanche
111. Carditis
112. Peripneumonia
113. Hepatitis
114. Splenitis
115. Nephritis.

CLASS IV.—SPASMI.

Order I.
TONICI PARTIALES.

116. Strabismus
117. Trismus
118. Obstipitas
119. Contractura
120. Crampus
121. Priapismus

Order II.
TONICI GENERALES.

122. Tetanus
123. Catochus.

Order III.
CLONICI PARTIALES.

124. Nystagmus
125. Carphologia
126. Pandiculatio
127. Apomyttosis
128. Convulsio
129. Tremor
130. Palpitatio
131. Claudicatio.

Order IV.
CLONICI GENERALES.

132. Rigor
133. Eclampsia
134. Epilepsia
135. Hysteria
136. Scelotyrbe
137. Beriberia.

CLASS V.—ANHELATIONES.

Order I.
SPASMODICÆ.

138. Ephialtes
139. Sternutatio
140. Oscedo
141. Singultus
142. Tussis.

Order II.
OPPRESSIVÆ.

143. Stertor
144. Dyspnœa
145. Asthma
146. Orthopnœa
147. Angina
148. Pleurodyne
149. Rheuma
150. Hydrothorax
151. Empyema.

CLASS VI.—DEBILITATES.

Order I.
DYSÆSTHESIÆ.

152. Cataracta
153. Caligo
154. Amblyopia
155. Amaurosis
156. Anosmia
157. Agheustia
158. Dysecœa
159. Paracusis
160. Cophosis
161. Anæsthesia.

Order II.
ANEPITHYMIÆ.

162. Anorexia
163. Adipsia
164. Anaphrodisia.

Order III.
DYSCINESIÆ.

165. Mutitas
166. Aphonia
167. Psellismus
168. Paraphonia
169. Paralysis
170. Hemiplegia
171. Paraplexia.

Order IV.
LEIPOPSYCHIÆ.

172. Asthenia
173. Leipothymia
174. Syncope
175. Asphyxia.

Order V.
COMATA.

176. Catalepsis
177. Ecstasis

178. Typhomania
179. Lethargus
180. Cataphora
181. Carus
182. Apoplexia.

CLASS VII.—DOLORES.

Order I.
VAGI.

183. Arthritis
184. Ostocopus
185. Rheumatismus
186. Catarrhus
187. Anxietas
188. Lassitudo
189. Stupor
190. Pruritus
191. Algor
192. Ardor.

Order II,
CAPITIS.

193. Cephalalgia
194. Cephalæa
195. Hemicrania
196. Ophthalmia
197. Otalgia
198. Odontalgia.

Order III.
PECTORIS.

199. Dysphagia
200. Pyrosis
201. Cardiogmus.

Order IV.
ABDOMINALES INTERNI.

202. Cardialgia
203. Gastrodynia
204. Colica
205. Hepatalgia
206. Splenalgia
207. Nephralgia
208. Dystocia
209. Hysteralgia.

Order V.
EXTERNI ET ARTUUM.

210. Mastodynia
211. Rachialgia
212. Lumbago
213. Ischias
214. Proctalgia
215. Pudendagra.

CLASS VIII.—VESANIÆ.

Order I.
HALLUCINATIONES.

216. Vertigo
217. Suffusio
218. Diplopia
219. Syrigmos
220. Hypochondriasis
221. Somnambulismus

Order II.
MOROSITATES.

222. Pica
223. Bulimia
224. Polydipsia
225. Antipathia
226. Nostalgia
227. Panophobia
228. Satyriasis
229. Nymphomania
230. Tarantismus
231. Hydrophobia.

Order III.—DELIRIA.

232. Paraphrosyne
233. Amentia
234. Melancholia
235. Mania
236. Dæmonomania.

Order IV.
VESANIAE ANOMALAE.

237. Amnesia.
238. Agrypnia.

CLASS IX.—FLUXUS.

Order I.
SANGUIFLUXUS.

239. Hæmorrhagia
240. Hæmoptysis
241. Stomacace
242. Hæmatemesis
243. Hæmaturia
244. Menorrhagia
245. Abortus.

Order II.
ALVIFLUXUS.

246. Hepatirrhœa
247. Hæmorrhois
248. Dysenteria
249. Melæna
250. Nausea
251. Vomitus
252. Ileus
253. Cholera
254. Diarrhœa
255. Cæliaca
256. Lienteria
257. Tenesmus.

Order III.
SERIFLUXUS.

258. Ephidrosis
259. Epiphora
260. Coryza
261. Ptyalismus
262. Anacatharsis
263. Diabetes
264. Enuresis
265. Dysuria
266. Pyuria
267. Leucorrhœa
268. Gonorrhœa
269. Dyspermatismus
270. Galactirrhœa
271. Otorrhœa.

Order IV.
AERIFLUXUS.

272. Flatulentia
273. Ædopsophia
274. Dysodia

CLASS X.—CACHEXIÆ.

Order I.
MACIES.

275. Tabes
276. Phthisis
277. Atrophia
278. Aridura.

Order II.
INTUMESCENTIÆ.

279. Polysarcia
280. Pneumatosis
281. Anasarca
282. Phlegmatia
283. Physconia
284. Graviditas.

Order III.
HYDROPES PARTIALES.

285. Hydrocephalus.
286. Physocephalus
287. Hydrorachitis
288. Ascites
289. Hydrometra
290. Physometra
291. Tympanites
292. Meteorismus
293. Ischuria.

Order IV.
TUBERA.

294. Rachitis
295. Scrophula
296. Carcinoma
297. Leontiasis
298. Malis
299. Frambœsia.

Order V.
IMPETIGINES.

300. Syphilis
301. Scorbutus.
302. Elephantiasis
303. Lepra
304. Scabies
305. Tinea

ORDER VI.
ICTERITIÆ.
306. Aurigo
307. Melasicterus
308. Phænigmus
309. Chlorosis

ORDER VII.
CACHEXIAE ANOMALÆ.
310. Phthiriasis
311. Trichoma
312. Alopecia
313. Elcosis
314. Gangræna
315. Necrosis.

Synoptical View of the System of LINNÆUS.

CLASS I.—EXANTHEMATICI.

ORDER I.
CONTAGIOSI.
1. Morta
2. Pestis
3. Variola
4. Rubeola
5. Petechia
6. Syphilis

ORDER II.
SPORADICI.
7. Miliaria
8. Uredo
9. Aphtha.

ORDER III.
SOLITARII.
10. Erysipelas.

CLASS II.—CRITICI.

ORDER I.
CONTINENTES.
11. Diaria
12. Synocha
13. Synochus
14. Lenta.

ORDER II.
INTERMITTENTES.
15. Quotidiana
16. Tertiana
17. Quartana
18. Duplicana
19. Errana

ORDER III.
EXACERBANTES.
20. Amphimerina
21. Tritæus
22. Tetartophia
23. Hemitritæa
24. Hectica.

CLASS III.—PHLOGISTICI.

ORDER I.
MEMBRANACEI.
25. Phrenitis
26. Paraphrenesis
27. Pleuritis
28. Gastritis
29. Enteritis
30. Proctitis
31. Cystitis.

ORDER II.
PARENCHYMATICI.
32. Sphacelismus
33. Cynanche
34. Peripneumonia
35. Hepatitis
36. Splenitis
37. Nephritis
38. Hysteritis.

ORDER III.
MUSCULOSI.
39. Phlegmone.

CLASS IV.—DOLOROSI.

ORDER I.
INTRINSECI.
40. Cephalagia
41. Hemicrania
42. Gravedo
43. Ophthalmia
44. Otalgia
45. Odontalgia
46. Angina
47. Soda
48. Cardialgia
49. Gastrica
50. Colica
51. Hepatica
52. Splenica
53. Pleuritica
54. Pneumonica
55. Hysteralgia
56. Nephritica
57. Dysuria
58. Pudendagra
59. Proctica.

ORDER II.
EXTRINSECI.
60. Arthritis
61. Ostocopus
62. Rheumatismus
63. Volatica
64. Pruritus.

CLASS V.—MENTALES.

ORDER I.
IDEALES.
65. Delirium
66. Paraphrosyne
67. Amentia
68. Mania
69. Dæmonia
70. Vesania
71. Melancholia.

ORDER II.
IMAGINARII.
72. Syringmos
73. Phantasma
74. Vertigo
75. Panophobia
76. Hypochondriasis
77. Somnambulismus.

ORDER III.
PATHETECI.
78. Citta
79. Bulimia
80. Polydipsia
81. Satyriasis
82. Erotomania
83. Nostalgia
84. Tarantismus
85. Rabies
86. Hydrophobia
87. Cacositia
88. Antipathia
89. Anxietas.

CLASS VI.—QUIETALES.

ORDER I.
DEFECTIVI.
90. Lassitudo
91. Languor
92. Asthenia
93. Lipothymia
94. Syncope
95. Asphyxia.

ORDER II.
SOPOROSI.
96. Somnolentia
97. Typhomania
98. Lethargus
99. Cataphora
100. Carus
101. Apoplexia
102. Paraplegia
103. Hemiplegia

104. Paralysis
105. Stupor.

ORDER III. PRIVATIVI.

106. Morosis
107. Oblivio
108. Amblyopia.
109. Cataracta
110. Amaurosis
111. Scotomia
112. Cophosis
113. Anosmia
114. Ageustia
115. Aphonia
116. Anorexia
117. Adipsia
118. Anæsthesia
119. Atecnia
120. Atonia.

CLASS VII. — MOTORII.

ORDER I. SPASTICI.

121. Spasmus
122. Priapismus
123. Borborygmos
124. Trismos
125. Sardiasis
126. Hysteria
127. Tetanus
128. Catochus
129. Catalepsis
130. Agrypnia.

ORDER II. AGITATORII.

131. Tremor
132. Palpitatio
133. Orgasmus
134. Subsultus
135. Carpologia
136. Stridor
137. Hippos
138. Psellismus
139. Chorea
140. Beriberi.

ORDER II. AGITATORII.

141. Rigor
142. Convulsio.
143. Epilepsia
144. Hieranosos
145. Raphania.

CLASS VIII. — SUPPRESSORII.

ORDER I. SUFFOCATORII.

146. Raucedo
147. Vociferatio
148. Risus
149. Fletus
150. Suspirium
151. Oscitatio
152. Pandiculatio
153. Singultus
154. Sternutatio
155. Tussis
156. Stertor
157. Anhelatio
158. Suffocatio
159. Empyema
160. Dyspnœa
161. Asthma
162. Orthopnœa
163. Ephialtes.

ORDER II. CONSTRICTORII.

164. Aglutitio
165. Flatulentia
166. Obstipatio
167. Ischuria
168. Dysmenorrhœa
169. Dyslochia
170. Aglactatio
171. Sterilitas.

CLASS IX. — EVACUATORII.

ORDER I. CAPITIS.

172. Otorrhœa
173. Epiphora
174. Hæmorrhagia
175. Coryza
176. Stomacace
177. Ptyalismus.

ORDER. II. THORACIS.

178. Screatus
179. Expectoratio
180. Hæmoptysis
181. Vomica.

ORDER III. ADOMINIS.

182. Ructus
183. Nausea
184. Vomica
185. Hæmatemesis
186. Iliaca
187. Cholera
188. Diarrhœa
189. Lienteria
190. Cœliaca
191. Cholirica
192. Dysenteria
193. Hæmorrhois
194. Tenesmus
195. Crepitus.

ORDER IV. GENITALIUM.

196. Enuresis
197. Stranguria
198. Diabetes.
199. Hæmaturia
200. Glus
201. Gonorrhœa
202. Leucorrhœa
203. Menorrhagia
204. Parturitio
205. Abortus
206. Mola.

ORDER V. CORPORIS EXTERNI.

207. Galactia
208. Sudor.

CLASS X. — DEFORMES.

ORDER I. EMACIANTES.

209. Phthisis
210. Tabes
211. Atrophia
212. Marasmus
213. Rachitis.

ORDER II. TUMIDOSI.

214. Polysarcia
215. Leucophlegmatia
216. Anasarca
217. Hydrocephalus
218. Ascites
219. Hyposarca
220. Tympanites
221. Graviditas

ORDER III. DECOLORES.

222. Cachexia
223. Chlorosis
224. Scorbutus
225. Icterus
226. Plethora.

CLASS. XI. — VITIA.

ORDER I. HUMORALIA.

227. Aridura
228. Digitium
229. Emphysema
230. Oedema
231. Sugillatio
232. Inflammatio
233. Abscessus
234. Gangrena
235. Sphacelus.

Order II.
DIALYTICA.

236. Fractura
237. Luxatura
238. Ruptura
239. Contusura
240. Profusio
241. Vulnus
242. Amputatura
243. Laceratura
244. Punctura
245. Morsura
246. Combustura
247. Excoriatura
248. Intertrigo
249. Rhagas

Order III.
EXULCERATIONES.

250. Ulcus
251. Cacoethes
252. Noma
253. Carcinoma
254. Ozena
255. Fistula
256. Caries
257. Arthrocace
258. Cocyta
259. Paronychia
260. Pernio
261. Pressura
262. Arctura.

Order IV.
SCABIES.

263. Lepra
264. Tinea
265. Achor
266. Psora
267. Lippitudo
268. Serpigo
269. Herpes
270. Varus
271. Bacchia
272. Bubo
273. Anthrax
274. Phlyctæna
275. Pustula
276. Papula
277. Hordeolum
278. Verruca
279. Clavus
280. Myrmecium
281. Eschara.

Order V.
TUMORES PROTUBERANTES.

282. Aneurisma
283. Varix
284. Schirrus
285. Struma
286. Atheroma
287. Anchylosis
288. Ganglion
289. Natta
290. Spinola
291. Exostosis.

Order VI.
PROCIDENTIAE.

292. Hernia
293. Prolapsus
294. Condyloma
295. Sarcoma
296. Pterygium
297. Ectropium
298. Phimosis
299. Clitorismus.

Order VII.
DEFORMATIONES.

300. Contractura
301. Gibber
302. Lordosis
303. Distortio
304. Tortura
305. Strabismus
306. Lagophthalmia
307. Nyctalopia
308. Presbytia
309. Myopia
310. Labarium
311. Lagostoma
312. Apella
313. Atreta
314. Plica
315. Hirsuties
316. Alopecia
317. Trichiasis.

Order VIII.
MACULÆ.

318. Cicatrix
319. Nævus
320. Morphæa
321. Vibex
322. Sudamen
323. Melasma
324. Hepatizon
325. Lentigo
326. Ephelis.

Synoptical View of the System of Vogel.

CLASS I.—FEBRES.

Order I.
INTERMITTENTES.

1. Quotidiana
2. Tertiana
3. Quartana
4. Quintana
5. Sextana
6. Septana
7. Octana
8. Nonana
9. Decimana
10. Vaga
11. Menstrua
12. Tertiana duplex
13. Quartana duplex
14. Quartana triplex.

Order II.
CONTINUÆ.

§ 1. *Simplices.*

15. Quotidiana
16. Synochus
17. Amatoria
18. Phrenitis
19. Epiala
20. Causos
21. Elodes
22. Lethargus
23. Typhomania
24. Leipyria
25. Phricodes
26. Lyngodes
27. Assodes
28. Cholerica
29. Syncopalis
30. Hydrophobia
31. Oscitans
32. Ictericodes
33. Pestilentialis
34. Siriasis.

§ 2. *Compositæ.*

¶ 1. *Exanthematicæ.*

35. Variolosa
36. Morbillosa
37. Miliaris
38. Petechialis
39. Scarlatina
40. Urtica
41. Bullosa
42. Varicella
43. Pemphigodes
44. Aphthosa.

¶ 2. *Inflammatoriæ.*

45. Phrenismus
46. Chemosis
47. Ophthalmites
48. Otites
49. Angina
50. Pleuritis
51. Peripneumonia
52. Mediastina
53. Pericarditis
54. Carditis
55. Paraphrenitis
56. Gastritis
57. Enteritis
58. Hepatitis
59. Splenitis
60. Mesenteritis
61. Omentitis
62. Peritonitis
63. Myocolitis
64. Pancreatica
65. Nephritis
66. Cystitis
67. Hysteritis
68. Erysipelacea
69. Podagrica
70. Panaritia
71. Cyssotis.

¶ 3. *Symptomaticæ.*

72. Apoplectica

73. Catarrhalis
74. Rheumatica
75. Hæmorrhoidalis
76. Lactea
77. Vulneraria
78. Suppuratoria
79. Lenta
80. Hectica.

CLASS II.—PROFLUVIA.

ORDER I. HÆMORRHAGIÆ.

81. Hæmorrhagia
82. Epistaxis
83. Hæmoptoe
84. Hæmoptysis
85. Stomacace
86. Odontirrhœa
87. Otorrhœa
88. Ophthalmorrhagia
89. Hæmatemesis
90. Hepatirrhœa
91. Catarrhexis
92. Hæmaturia
93. Cystirrhagia
94. Stymatosis
95. Hæmatopedesis
96. Menorrhagia
97. Abortio.

ORDER II. APOCENOSES.

98. Catarrhus
99. Epiphora
100. Coryza
101. Otopuosis
102. Otoplatos
103. Ptyalismus
104. Vomica
105. Diarrhæa
106. Puorrhæa
107. Dysenteria
108. Lienteria
109. Cœliaca
110. Cholera
111. Pituitaria
112. Leucorrhois
113. Eneuresis
114. Diuresis
115. Diabetes
116. Puoturia
117. Chylaria
118. Gonorrhœa
119. Leucorrhœa
120. Exoneirosis
121. Hydropedesis
122. Galactia
123. Hypercatharsis
124. Ecphyse
125. Dysodia.

CLASS III.—EPISCHESES.

126. Gravedo
127. Flatulentia
128. Obstipatio
129. Ischuria
130. Amenorrhœa
131. Dyslochia
132. Deuteria
133. Agalaxis.

CLASS IV.—DOLORES.

134. Anxietas
135. Blestrismus
136. Pruritus
137. Catapsyxis
138. Rheumatismus
139. Arthritis
140. Cephalalgia
141. Cephalæa
142. Clavus
143. Hemicrania
144. Carebaria
145. Odontalgia
146. Hæmodia
147. Odaxismus
148. Otalgia
149. Acataposis
150. Cionis
151. Himantesis
152. Cardiogmus
153. Mastodynia
154. Soda
155. Periadynia
156. Pneumatosis
157. Cardialgia
158. Encausis
159. Nausea
160. Colica
161. Eilema
162. Ileus
163. Stranguria
164. Dysuria
165. Lithiasis
166. Tenesmus
167. Clunesia
168. Cedma
169. Hysteralgia
170. Dysmenorrhæa
171. Dystochia
172. Atocia
173. Priapismus
174. Psoriasis
175. Podagra
176. Osteocopus
177. Psophos
178. Volatica
179. Epiphlogisma.

CLASS V.—SPASMI.

180. Tetanus
181. Opisthotonus
182. Episthotonus
183. Catochus
184. Tremor
185. Frigus
186. Horror
187. Rigor
188. Epilepsia
189. Eclampsia
190. Hieranosos
191. Convulsio
192. Raphania
193. Chorea
194. Crampus
195. Scelotyrbe
196. Angone
197. Glossocele
198. Glossocoma
199. Hippos
200. Illosis
201. Cinclesis
202. Cataclasis
203. Cillosis
204. Sternutatio
205. Tussis
206. Clamor
207. Trismus
208. Capistrum
209. Sardiasis
210. Gelasmus
211. Incubus
212. Singultus
213. Palpitatio
214. Vomitus
215. Ructus
216. Ruminatio
217. Oesophagismus
218. Hypochondriasis
219. Hysteria
220. Phlogosis
221. Digitium.

CLASS VI.—ADYNAMIÆ.

222. Lassitudo
223. Asthenia
224. Torpor
225. Adynamia
226. Paralysis
227. Paraplegia
228. Hemiplegia
229. Apoplexia
230. Catalepsis
231. Carus
232. Coma
233. Somnolentia

234. Hypophasis
235. Ptosis
236. Amblyopia
237. Mydriasis
238. Amaurosis
239. Cataracta
240. Synizezis
241. Glaucoma
242. Achlys
243. Nyctalopia
244. Hemeralopia
245. Hemalopia
246. Dysicoia
247. Surditas
248. Anosmia
249. Apogeusis
250. Asaphia
251. Clangor
252. Raucitas
253. Aphonia
254. Leptophonia
255. Oxyphonia
256. Rhenophonia
257. Mutitas
258. Traulotis
259. Psellotis
260. Ichnophonia
261. Battarismus
262. Suspirium
263. Oscitatio
264. Pandiculatio
265. Apnæa
266. Macropnœa
267. Dyspnœa
268. Asthma
269. Orthopnœa
270. Pnigma
271. Renchus
272. Rhochmos
273. Lipothymia
274. Syncope
275. Asphyxia
276. Apepsia
277. Dyspepsia
278. Diapthora
279. Anorexia
280. Anatrope
281. Adipsia
282. Acyisis
283. Agenesia
284. Anodynia.

CLASS VII.—HYPÆRESTHESES.

285. Antipathia
286. Agrypnia
287. Phantasma
288. Caligo
289. Hæmalopia
290. Marmaryge
291. Dysopia
292. Susurrus
293. Vertigo
294. Apogeusia
295. Polydipsia
296. Bulimus
297. Addephagia
298. Cynorexia
299. Allotriophagia
300. Malacia
301. Pica
302. Bombus
303. Celsa.

CLASS VIII.—CACHEXIÆ.

304. Cachexia
305. Chlorosis
306. Icterus
307. Melanchlorus
308. Atrophia
309. Tabes
310. Phthisis
311. Hydrothorax
312. Rachitis
313. Anasarca
314. Ascites
315. Hydrocystis
316. Tympanites
317. Hysterophyse
318. Scorbutus
319. Syphilis
320. Lepra
321. Elephantiasis
322. Elephantia
323. Plica
324. Phthiriasis
325. Physconia
326. Paracyisis
327. Gangræna
328. Sphacelus.

CLASS IX.—PARANOIÆ.

329. Athymia
330. Delirium
331. Mania
332. Melancholia
333. Ecstasis
334. Ecplexis
335. Enthusiasmus
336. Stupiditas
337. Amentia
338. Oblivio
339. Somnium
340. Hypnobatasis.

CLASS X.—VITIA.

ORDER I.
INFLAMMATIONES.

341. Ophthalmia
342. Blepharotis
343. Erysipelas
344. Hieropyr
345. Paronychia
346. Onychia
347. Encausis
348. Phimosis
349. Paraphimosis
350. Pernio

ORDER II.
HUMORES.

351. Plegmone
352. Furunculus
353. Anthrax
354. Abscissus
355. Onyx
356. Hippopyon
357. Phygethlon
358. Empyema
359. Phyma
360. Ecthymata
361. Urticaria
362. Parulis
363. Epulis
364. Anchylops
365. Paraglossa
366. Chilon
367. Scrofula
368. Bubon
369. Bronchocele
370. Parotis
371. Gongrona
372. Sparganosis
373. Coilima
374. Scirrhus
375. Cancer
376. Sarcoma
377. Polypus
378. Condyloma
379. Ganglion
380. Ranula
381. Terminthus
382. Oedema
383. Encephalocele
384. Hydrocephalum
385. Hydropthalmia
386. Spina bifida
387. Hydromphalus
388. Hydrocele
389. Hydrops scroti
390. Steatites
391. Pneumatosis
392. Emphysema
393. Hysteroptosis
394. Cystoptosis
395. Archoptoma
396. Bubonocele
397. Oscheocele
398. Omphalocele
399. Merocele
400. Enterocele ovularis
401. Ischiatocele
402. Elytrocele
403. Hypogastrocele
404. Cystocele
405. Cyrtoma

406. Hydrenterocele
407. Varix
408. Aneurisma
409. Cirsocele
410. Gastrocele
411. Hepatocele
412. Splenocele
413. Hysterocele
414. Hygrocirsocele
415. Sarcocele
416. Physocele
417. Exostosis
418. Hyperostosis
419. Pædarthrocace
420. Encystis
421. Staphyloma
422. Staphylosis
423. Fungus
424. Tofus
425. Flemen.

Order III.
EXTUBERANTIÆ.

426. Verruca
427. Porrus
428. Clavus
429. Callus
430. Encanthis
431. Pladarotis
432. Pinnula
433. Pterygium
434. Hordeolum
435. Grando
436. Varus
437. Gutta rosacea
438. Ephelis
439. Esoche
440. Exoche

Order IV.
PUSTULÆ and PAPULÆ.

441. Epinyctis
442. Phlyctæna
443. Herpes
444. Scabies
445. Aquula
446. Hydroa
447. Variola
448. Varicella
449. Purpura
450. Encauma.

Order V.
MACULÆ.

451. Ecchymoma
452. Petechiæ
453. Morbilli
454. Scarlatæ
455. Lentigo
456. Urticaria
457. Stigma
458. Vibex
459. Vitiligo
460. Leuce
461. Cyasma
462. Lichen
463. Selina
464. Nebula

Order VI.
DISSOLUTIONES.

465. Vulnus
466. Ruptura
467. Rhagas
468. Fractura
469. Fissura
470. Plicatio
471. Thlasis
472. Luxatio
473. Subluxatio
474. Diachalasis
475. Attritis
476. Porrigo
477. Aposyrma
478. Anapleusis
479. Spasma
480. Contusio
481. Diabrosis
482. Agomphiasis
483. Eschara
484. Piptonychia
485. Cacoethes
486. Therioma
487. Carcinoma
488. Phagedæna
489. Noma
490. Sycosis
491. Fistula
492. Sinus
493. Caries
494. Achores
495. Crusta lactea
496. Favus
497. Tinea
498. Argemon
499. Ægilops
500. Ozæna
501. Aphthæ
502. Intertrigo
503. Rhacosis.

Order VII.
CONCRETIONES.

504. Ancyloblepharon
505. Zynizesis
506. Dacrymoma
507. Ancyloglossum
508. Ancylosis
509. Cicatrix
510. Dactylion.

CLASS XI.—DEFORMITATES.

511. Phoxos
512. Gibber
513. Caput obstipum
514. Strabismus
515. Myopiasis
516. Lagophthalmus
517. Trichiasis
518. Ectropium
519. Entropium
520. Rhœas
521. Rhyssemata
522. Lagocheilos
523. Malachosteon
524. Hirsuties
525. Canities
526. Distrix
527. Xirasia
528. Phalacrotis
529. Alopecia
530. Madarosis
531. Ptilosis
532. Rodatio
533. Phalangosis
534. Coloboma
535. Cercosis
536. Cholosis
537. Gryposis
538. Nævus
539. Monstrositas
540. Polysarcia
541. Ischnotis
542. Rhicnosis
543. Varus
544. Valgus
545. Leiopodes
546. Apella
547. Hypospadiæos
548. Urorhœas
549. Atreta
550. Saniodes
551. Cripsorchis
552. Hermaphrodites
553. Dionysiscus
554. Artetiscus
555. Nefrendis
556. Spanopogon
557. Hyperartetiscus
558. Galiancon
559. Galbulus
560. Mola.

A Synoptical View of the System of Sagar.

CLASS I.—VITIA.

Order I.
MACULÆ.

1. Leucoma
2. Vitiligo
3. Ephelis
4. Nævus
5. Ecchymoma.

Order II.
EFFLORESCENTIÆ.

6. Pustula
7. Papula
8. Phlycthæna
9. Bacchia
10. Varus
11. Herpes

12. Epinyctis
13. Hemeropathos
14. Psydracia
15. Hydroa.

Order. III. PHYMATA.

16. Erythema
17. Oedema
18. Emphysema
19. Scirrhus
20. Inflammatio
21. Bubo
22. Parotis
23. Furunculus
24. Anthrax
25. Cancer
26. Paronychia
27. Phimosis.

Order IV. EXCRESCENTIÆ.

28. Sarcoma
29. Condyloma
30. Verruca
31. Pterygium
32. Hordeolum
33. Trachelophyma
34. Exostosis.

Order V. CYSTIDES.

35. Aneurysma
36. Varix
37. Marisca
38. Hydatis
39. Staphyloma
40. Lupia
41. Hydarthrus
42. Apostema
43. Exomphalus
44. Oscheophyma.

Order VI. ECTOPIÆ.

45. Exophthalmia
46. Blepharoptosis
47. Hypostaphyle
48. Paraglossa
49. Proptoma
50. Exania
51. Exocystis
52. Hysteroptosis
53. Colpoptosis
54. Gastrocele
55. Omphalocele
56. Hepatocele
57. Merocele
58. Bubonocele
59. Opodeocele
60. Ischiocele
61. Colpocele
62. Perinæocele
63. Peritonæorixis
64. Encephalocele
65. Hysteroloxia
66. Parorchidium
67. Exarthrema
68. Diastasis
69. Loxarthrus
70. Gibbositas
71. Lordosis.

Order VII. DEFORMITATES.

72. Lagostoma
73. Apella
74. Polymerisma
75. Epidosis
76. Anchylomerisma
77. Hirsuties.

CLASS II.—PLAGÆ.

Order I. SOLUTIONES.

recentes, cruentæ.

78. Vulnus
79. Punctura
80. Sclopetoplaga
81. Morsus
82. Excoriatio
83. Contusio
84. Ruptura.

Order II. SOLUTIONES.

recentes, cruentæ, artificiales.

85. Operatio
86. Amputatio
87. Sutura
88. Paracentesis.

Order III. SOLUTIONES.

incruentæ.

89. Ulcus
90. Exulceratio
91. Fistula
92. Sinus
93. Eschara
94. Caries
95. Arthrocace.

Order IV. SOLUTIONES.

anomalæ.

96. Rhagas
97. Ambustio
98. Fractura
99. Fissura.

CLASS III.—CACHEXIÆ.

Order I. MACIES.

100. Tabes
101. Phthisis
102. Atrophia
103. Hæmataporia
104. Aridura.

Order II. INTUMESCENTIÆ.

105. Plethora
106. Polysarcia
107. Pneumatosis
108. Anasarca
109. Phlegmatia
110. Physconia
111. Graviditas.

Order III. HYDROPES *partiales.*

112. Hydrocephalus.
113. Physocephalus
114. Hydrorachitis
115. Ascites
116. Hydrometra
117. Physometra
118. Tympanites
119. Meteorismus.

Order IV. TUBERA.

120. Rachitis
121. Scrophula
122. Carcinoma
123. Leontiasis
124. Malis
125. Framboesia.

Order V. IMPETIGINES.

126. Syphilis
127. Scorbutus
128. Elephantiasis
129. Lepra
130. Scabies
131. Tinea.

Order VI. ICTERITIÆ.

132. Aurigo
133. Melasicterus
134. Phœnigmus
135. Chlorosis.

Order VII. ANOMALÆ.

136. Phthiriasis
137. Trichoma
138. Alopecia
139. Elcosis
140. Gangræna
141. Necrosis.

CLASS IV.—DOLORES.

Order I. VAGI.

142. Arthritis
143. Ostocopus
144. Rheumatismus
145. Catarrhus
146. Anxietas
147. Lassitudo
148. Stupor
149. Pruritus
150. Algor
151. Ardor.

Order II.
CAPITIS.
152. Cephalalgia
153. Cephalæa
154. Hemicrania
155. Ophthalmia
156. Otalgia
157. Odontalgia.

Order III.
PECTORIS.
158. Pyrosis
159. Cardiogmus.

Order IV.
ABDOMINIS.
160. Cardialgia
161. Gastrodynia
162. Colica
163. Hepatalgia
164. Splenalgia
165. Nephralgia
166. Hysteralgia.

Order V.
EXTERNARUM.
167. Mastodynia
168. Rachialgia
169. Lumbago
170. Ischias
171. Proctalgia
172. Pudendagra
173. Digitium.

CLASS V.—FLUXUS.

Order I.
SANGUIFLUXUS.
174. Hæmorrhagia
175. Hæmoptysis
176. Stomacace
177. Hæmatemesis
178. Hæmaturia
179. Metrorrhagia
180. Abortus.

Order II.
ALVIFLUXUS.
sanguinolenti.
181. Hepatirrhœa
182. Hæmorrhois
183. Dysenteria
184. Melæna.

Order III.
ALVIFLUXUS.
non sanguinolenti.
185. Nausea
186. Vomitus
187. Ileus
188. Cholera
189. Diarrhœa
190. Cœliaca
191. Lienteria
192. Tenesmus
193. Proctorrhœa.

Order IV.
SERIFLUXUS.
194. Ephidrosis
195. Epiphora
196. Coryza
197. Ptyalismus
198. Anacatharsis
199. Diabetes
200. Enuresis
201. Pyuria
202. Leucorrhœa
203. Lochiorrhœa
204. Gonorrhœa
205. Galactirrhœa
206. Otorrhœa.

Order V.
AERIFLUXUS.
207. Flatulentia
208. Ædopsophia
209. Dysodia.

CLASS VI.—SUPPRESSIONES.

Order I.
EGERENDORUM.
210. Adiapneustia
211. Sterilitas
212. Ischuria
213. Dysuria
214. Aglactatio
215. Dyslochia.

Order II.
INGERENDORUM.
216. Dysphagia
217. Angina.

Order III.
IMI VENTRIS.
218. Dysmenorrhœa
219. Dystocia
220. Dyshæmorrhois
221. Obstipatio.

CLASS VII.—SPASMI.

Order I.
TONICI PARTIALES.
222. Strabismus
223. Trismus
224. Obstipitas
225. Contractura
226. Crampus
227. Priapismus.

Order II.
TONICI GENERALES.
228. Tetanus
229. Catochus.

Order III.
CHRONICI PARTIALES.
230. Nystagmus
231. Carphologia
232. Subsultus
233. Pandiculatio
234. Apomystosis
235. Convulsio
236. Tremor
237. Palpitatio
238. Claudicatio.

Order IV.
CRONICI GENERALES.
239. Phricasmus
240. Eclampsia
241. Epilepsia
242. Hysteria
243. Scelotyrbe
244. Beriberia.

CLASS VIII.—ANHELATIONES.

Order I.
SPASMODICÆ.
245. Ephialtes
246. Sternutatio
247. Oscedo
248. Singultus
249. Tussis.

Order II.
SUPPRESSIVÆ.
250. Stertor
251. Dyspnœa
252. Asthma
253. Orthopnœa
254. Pleurodyne
255. Rheuma
256. Hydrothorax
257. Empyema.

CLASS IX.—DEBILITATES.

Order I.
DYSÆSTHESIÆ.
258. Amblyopia
259. Caligo
260. Cataracta
261. Amaurosis
262. Anosmia
263. Agheustia
264. Dysecœa
265. Paracusis
266. Cophosis
267. Anæsthesia.

Order II.
ANEPYTHYMIÆ.
268. Anorexia
269. Adipsia
270. Anaphrodisia.

Order III.
DYSCINESIÆ.
271. Mutitas
272. Aphonia
273. Psellismus
274. Cacophonia
275. Paralysis

276. Hemiplegia
277. Paraplexia.

Order IV.
LEIPOPSYCHIÆ.

278. Asthenia
279. Lipothymia
280. Syncope
281. Asphyxia.

Order V.
COMATA.

282. Catalepsis
283. Ectasis
284. Typhomania
285. Lethargus
286. Cataphora
287. Carus
288. Apoplexia.

CLASS X.—EXANTHEMATA.

Order I.
CONTAGIOSA.

289. Pestis
290. Variola
291. Pemphigus
292. Purpura
293. Rubeola
294. Scarlatina.

Order II.
NON CONTAGIOSA.

295. Miliaris
296. Erysipelas
297. Essera
298. Aphtha.

CLASS XI.—PHLEGMASIÆ.

Order I.
MUSCULOSÆ.

299. Phlegmone
300. Cynanche
301. Myositis
302. Carditis

Order II.
MEMBRANACÆ.

303. Phrenitis
304. Diaghragmitis
305. Pleuritis
306. Gastritis
307. Enteritis
308. Epiploitis
309. Cystitis.

Order III.
PARENCHYMATOSÆ.

310. Cephalitis
311. Peripneumonia
312. Hepatitis
313. Splenitis
314. Nephritis
315. Metritis.

CLASS XII.—FEBRES.

Order I.
CONTINUÆ.

316. Judicatoria
317. Humoraria
318. Frigeraria
319. Typhus
320. Hectica.

Order II.
REMITTENTES.

321. Amphimerina
322. Tritæophya
323. Tetartophya.

Order III.
INTERMITTENTES.

324. Quotidiana
325. Tertiana
326. Quartana
327. Erratica.

CLASS XIII.—VESANIÆ.

Order I.
HALLUCINATIONES.

328. Vertigo
329. Suffusio
330. Diplopia
331. Syrigmos
332. Hypochondriasis
333. Somnambulismus.

Order II.
MOROSITATES.

334. Pica
335. Bulimia
336. Polydipsia
337. Antipathia
338. Nostalgia
339. Panophobia
340. Satyriasis
341. Nymphomania
342. Tarantismus
343. Hydrophobia
344. Rabies.

Order III.
DELIRIA.

345. Paraphrosyne
346. Amentia
347. Melancholia
348. Dæmonomania
349. Mania.

Order IV.
ANOMALÆ.

350. Amnesia
351. Agrypnia.

Synoptical View of the System of Dr. Macbride.

CLASS I.—UNIVERSAL DISEASES.

Order I.
FEVERS.

1. Continued
2. Intermittent
3. Remittent
4. Eruptive
5. Hectic.

Order II.
INFLAMMATIONS.

6. External
7. Internal.

Order III.
FLUXES.

8. Alvine
9. Hæmorrhage
10. Humoral discharge.

Order IV.
PAINFUL DISEASES.

11. Gout
12. Rheumatism
13. Ostocopus
14. Headach
15. Toothach
16. Earach
17. Pleurodyne
18. Pain in the stomach
19. Colic
20. Lithiasis
21. Ischuria
22. Proctalgia.

Order V.
SPASMODIC DISEASES.

23. Tetanus
24. Catochus
25. Locked jaw
26. Hydrophobia
27. Convulsion
28. Epilepsy
29. Eclampsia
30. Hieranosos.

Order VI.
WEAKNESSES and PRIVATIONS.

31. Coma
32. Palsy
33. Fainting.

Order VII.
ASTHMATIC DISORDERS.

34. Dyspnœa
35. Orthopnœa

36. Asthma
37. Hydrothorax
38. Empyema.

ORDER VIII.
MENTAL DISEASES.

39. Mania
40. Melancholia.

ORDER IX.
CACHEXIES, or *Humoral Diseases.*

41. Corpulency
42. Dropsy
43. Jaundice
44. Emphysema
45. Tympany
46. Physconia
47. Atrophia
48. Osteosarcosis
49. Sarcostosis
50. Mortification
51. Scurvy
52. Scrophula
53. Cancer
54. Lues Venerea.

CLASS II.—LOCAL DISEASES.

ORDER I.
OF THE INTERNAL SENSES.

55. Loss of memory
56. Hypochondriasis
57. Loss of judgment.

ORDER II.
OF THE EXTERNAL SENSES.

58. Blindness
59. Depraved sight
60. Deafness
61. Depraved hearing
62. Loss of smell
63. Depraved smell
64. Loss of taste
65. Depraved taste
66. Loss of feeling.

ORDER III.
OF THE APPETITES.

67. Anorexia
68. Cynorexia
69. Pica
70. Polydipsia
71. Satyriasis
72. Nymphomania
73. Anaphrodisia.

ORDER IV.
OF THE SECRETIONS and EXCRETIONS.

74. Epiphora
75. Coryza
76. Ptyalism
77. Anacatharsis
78. Otorrhœa
79. Diarrhœa
80. Incontinence of urine
81. Pyuria
82. Dysuria
83. Constipation
84. Tenesmus
85. Dysodia
86. Flatulence
87. Ædopsophia.

ORDER V.
IMPEDING DIFFERENT ACTIONS.

88. Aphonia
89. Mutitas
90. Paraphonia
91. Dysphagia
92. Wryneck
93. Angone
94. Sneezing
95. Hiccup
96. Cough
97. Vomiting
98. Palpitation of the heart
99. Chorea
100. Trismus
101. Nystagmus
102. Cramp
103. Scelotyrbe
104. Contraction
105. Paralysis
106. Anchylosis
107. Gibbositas
108. Lordosis
109. Hydarthrus.

ORDER VI.
OF THE EXTERNAL HABIT.

110. Tumour
111. Excrescence
112. Aneurism
113. Varix
114. Papulæ
115. Phlyctænæ
116. Pustulæ
117. Scabies, or Psora
118. Impetigo
119. Leprosy
120. Elephantiasis
121. Frambœsia
122. Herpes
123. Maculæ
124. Alopecia
125. Trichoma
126. Scald head
127. Phthiriasis.

ORDER VII.
DISLOCATIONS.

128. Hernia
129. Prolapsus
130. Luxation.

ORDER VIII.
SOLUTIONS OF CONTINUITY.

131. Wound
132. Ulcer
133. Fissure.
134. Fistula
135. Burn, or scald
136. Excoriation
137. Fracture
138. Caries.

CLASS III.—SEXUAL DISEASES.

ORDER I.
GENERAL, *proper to Men.*

139. Febris testicularis
140. Tabes dorsalis.

ORDER II.
LOCAL, *proper to Men.*

141. Dyspermatismus
142. Gonorrhœa simplex
143. Gonorrhœa virulenta
144. Priapism
145. Phimosis
146. Paraphimosis
147. Crystalline
148. Hernia humoralis
149. Hydrocele
150. Sarcocele
151. Cirsocele.

ORDER III. GENERAL, *proper to Women.*

152. Amenorrhœa
153. Chlorosis
154. Leucorrhœa
155. Menorrhagia
156. Hysteralgia
157. Graviditas
158. Abortus
159. Dystochia
160. Febris puerperalis
161. Mastodynia.

ORDER IV.
LOCAL, *proper to Women.*

162. Hydrops ovarii
163. Scirrhus ovarii
164. Hydrometra
165. Physometra
166. Prolapsus uteri
167. ——— vaginæ
168. Polypus uteri.

CLASS IV.—INFANTILE DISEASES.

ORDER I. GENERAL.

169. Colica meconialis
170. Colica lactentium
171. Diarrhœa infantum
172. Aphthæ
173. Eclampsia

174. Atrophia
175. Rachitis.

ORDER II. LOCAL.
176. Imperforation
177. Anchyloglossum

178. Aurigo
179. Purpura.
180. Crusta lactea.

NOSTA'LGIA. (Νοϛαλγια: from νοϛεω, to return, and αλγος, pain.) A vehement desire for revisiting one's country. A genus of disease in the class *Locales*, and order *Dysorexiæ*, of Cullen, known by impatience when absent from one's native home, and a vehement desire to return, attended with gloom and melancholy, loss of appetite, and want of sleep.

NO'THUS. (From νοθος, spurious.)

1. Those ribs which are not attached to the sternum are called nothæ costæ, the spurious ribs.

2. The term is applied to such diseases as resemble others: as peripneumonia notha, &c.

NOTIÆ'US. (From νωτον, the back.) An epithet of the spinal marrow.

NOTIO'DES. (From νοτις, moisture.) Applied to a fever, attended with a vitiation of the fluids, or a colliquative wasting.

NOUFER'S MEDICINE. This famous remedy was invented by Madam Noufer, as a cure for the tape-worm. See *Polypodium filixmas.*

NUBE'CULA. (Dim. of *nubes*, a cloud.) A cloud in the urine. A white speck in the eye.

NU'CES GA'LLÆ. Common galls.

NU'CES PURGA'NTES. See *Ricinus.*

NUCE'STA. See *Myristica moschata.*

NU'CHA. The hind part or nape of the neck.

NUCK, ANTHONY, a distinguished Dutch physician and anatomist, flourished at the Hague, and subsequently at Leyden, in the latter part of the 17th century. He filled the office of professor of anatomy and surgery in the latter university, and was also president of the college of surgeons. He pursued his dissections with great ardour, cultivating both human and comparative anatomy at every opportunity. He contributed some improvements also to the practice of surgery. He died about the year 1692.

NUCI'STA. The nutmeg.

NU'CLEUS. (*E nuce*, from the nut.) A kernel. A fruit enclosed in a hard shell.

NU'CULÆ SAPONA'RIÆ. See *Sapindus saponaria.*

NUMMULA'RIA. (From *nummus*, money, so called because its leaves are round, and of the size of the old silver two-pence.) See *Lysimachia nummularia.*

NUT, COCOA. The fruit of the *Cocos nucifera*, of Linnæus. Within the nut is found a kernel, as pleasant as an almond, and also a large quantity of liquor resembling milk, which the Indians greedily drink before the fruit is ripe, it being then pleasant, but when the nut is matured, the liquor becomes sour. Some full-grown nuts will contain a pint or more of this milk, the frequent drinking of which seems to have no bad effects upon the Indians; yet Europeans should be cautious of making too free with it at first, for when Lionel Wafer was at a small island in the South Sea, where the tree grew in plenty, some of his men were so delighted with it, that at parting they were resolved to drink their fill, which they did; but their appetites had liked to have cost them their lives, for though they were not drunk, yet they were so chilled and benumbed, that they could not stand, and were obliged to be carried aboard by those who had more prudence than themselves, and it was many days before they recovered. The shells of these nuts being hard, and capable of receiving a polish, they are often cut transversely, when, being mounted on stands, and having their edges silvered, or gilt, or otherwise ornamented, they serve the purpose of drinking-cups. The leaves of the tree are used for thatching, for brooms, baskets, and other utensils; and of the reticular web, growing at their base, the Indian women make cauls and aprons.

Nut, Barbadoes. See *Jatropha curcas.*

Nut, Pistachio. See *Pistacia vera.*

Nut, Purging. See *Jatropha curcas.*

Nutmeg. See *Myristica moschata.*

NUTRITION. *Nutritio.* Nutrition may be considered the completion of the assimilating functions. The food changed by a series of decompositions animalized and rendered similar to the being which it is designed to nourish, applies itself to those organs, the loss of which it is to supply; and this identification of nutritive matter to our organs constitutes nutrition.

The living body is continually losing its constituent parts, which a variety of causes are incessantly carrying off; several of its organs are constantly engaged in separating humours which pass off loaded with a part of its substance, consumed by the uniting action of air and caloric; while internal friction, by a pulsatory motion, detaches its particles.

Thus the animal machine is continually destroyed, and at distant periods of life does not, perhaps, contain a single particle of the same constituent parts. An experiment made with madder, (rubia tinctorum,) which, when mixed with the food, reddens the bones of animals, proves in a very decisive manner this perpetual decomposition of living animal matter. Entirely to obliterate the diffused red colour thus given to bones, it is only necessary to suspend for a time the use of this root. Therefore, if the most compact and solid parts be in a continual motion of decomposition and recomposition, there can be no doubt but that this motion must be more rapid in those parts, the constituent principles of which are in the smallest degree of cohesion, as in fluids.

It has been an object of consideration to determine the period of the entire renovation of the body; it has been said that an interval of seven years was necessary for the same particles to be totally obliterated, and their place supplied by others; but this change should seem to be more rapid in infancy and youth; it should also seem to be retarded in manhood, and require a very long time to be accomplished in old age, when all our parts acquire a remarkable degree of consistence and fixity, at the same time that the vital actions become more languid. There is no doubt but that sex, temperature, climate, profession, mode of living, and a variety of other causes, accelerate and retard this period, so that it is impossible to affirm any thing certain on the precise time of its duration.

In proportion as our parts are destroyed, they are renewed by homogeneous particles, or such as are exactly similar to themselves; otherwise their nature, which is always alike, would suffer continual changes. When the nutritive matter has been animalized, or assimilated to the body which it is designed to nourish, by the organs of digestion, absorption, circulation, respiration, and secretion, the parts which it supplies retain and incorporate it with their own substance. This nutritive identification is variously effected in different parts, as the brain, muscles, bones, &c.; each of these appropriates to itself, by a true secretion, that which is found analogous to its nature, and rejects the heterogeneous particles. A bone is a secretory organ, that becomes incrusted with phosphate of lime; the lymphatic vessels, which, in the work of nutrition perform the office of excretory ducts, remove this salt, after it has remained a certain time in the areolæ of its texture. It is the same in muscles with respect to the fibrin, and in the brain with albumen: each part imbibes, and renders solid in its structure, such juices as are of the same nature, in consequence of a power, of which the affinity of aggregation of the chemists gives us an idea, and perhaps furnishes us with an exact model.

A part to acquire nourishment should possess sensibility and motion; a ligature placed on its arteries and nerves, by destroying both these faculties, prevents it from being nourished, or having life. The blood flowing in the veins, and the fluid of the absorbents, contain vivifying and reparatory parts, in much smaller quantity than arterial blood; it is even generally believed that lymph and venous blood do not contain any thing directly nutritious.

The mechanism of nutrition would be explained, after having precisely determined the differences of composition that exist between the aliments on which we live, and the exact substance of our organs, if we could distinguish how each function divests them of their characters, to invest them with our properties; for each individual part seems to co-operate in changing their nutritious principle into our own peculiar structure. To resolve this problem, let us suppose a man living entirely on vegetables, which, in fact, constitute the principal part of the subsistence of the generality of men; whatever portion of the plant he may consume, whether stalk, leaves, flowers, seeds, or roots; carbon, hydrogen, and oxygen enter into their composition, which may be always, by a strict analysis, resolved into water and carbonic acid; to these three constituent principles, sometimes a small quantity of azote, salts, and other things, is united. If we then examine the nature of the organs of this man, whose diet consists exclusively in vegetables, they will be proved of a composition very different from the kind of food; azote predominates, although the vegetable substance contain it in very small quantity, and many new products will be discovered which had not been distinguished in the aliment, but which abound in the body receiving nourishment, and seem produced by the act of nutrition.

The essential part of this function, therefore, is to cause the nutritive matter to pass into a more advanced state of composition, to deprive it of a portion of its carbon and hydrogen, to give a predominance of azote, and develope several substances which were not before distinguishable. Every living body, without exception, seems to possess a faculty of forming and decomposing substances, by the assistance of which it is supported, and of giving rise to new products. The marine-plant, the ashes of which form soda, if sown in a box filled with earth that does not contain a particle of that alkali, and moistened with distilled water, furnishes it in as great a quantity as if the plant had been growing on the borders of the sea, in a swampy soil, always inundated by brackish or salt water.

Living bodies are the proper elaboratories in which such combinations and decompositions occur as art cannot imitate; bodies that to us appear simple, as sulphur and silex seem to form themselves of other parts, while some bodies, the composition of which we cannot determine, as certain metals, suffer inevitable decompositions; from which we may fairly conclude, that the powers of nature in the composition and decomposition of bodies, far surpass the science of chemists. For a substance to be employed in our nourishment, it should be capable of change and fermentation, that is, susceptible of experiencing an internal and spontaneous motion, by which its elements change their combination and qualities. This condition of spontaneous mutability, excludes from the class of aliment every thing which is not organized, or constituted part of a living being; thus minerals are absolutely refractory to the action of our organs, which cannot convert them into their own peculiar substance. The common principle drawn from alimentary substances, however various they may be, called by Hippocrates the aliment, is probably a composition capable of a great degree of change and fermentation; this is also the opinion of all those who have endeavoured to discover its nature. Lorry thinks it is a mucous body; Cullen considers it saccharine; Hallé believes it to be an hydrocarbonated oxyde, which only differs from the oxalic acid by having a smaller portion of oxygen. It is obvious that these three sentiments have the greatest resemblance, since oxygen, carbon, and hydrogen, united in different proportions, form a mucus, a saccharine body, and the oxalic base. The analysis of animal substances by nitric acid, reduces them to the latter base, by taking from them a great quantity of azot, the presence of which constitutes their most remarkable character.

Hallé believes that the hydro-carbonated oxyde is combined with oxygen, in the stomach and intestinal canal, whether the latter principle be introduced with the food into the primæ viæ, or furnished by the decomposed humours; the intestinal fluids suffer their azote to be disengaged, which is carried to the alimentary base, and replaces the carbon that had been attracted by the oxygen to form the carbonic acid. When in the lungs, and again subjected to the action of atmospheric oxygen, this gas carries off a certain portion of its carbon; and as it disengages the azote from the venous blood, it effects a new combination of this principle with the chyle; and when propelled to the skin, the atmospheric oxygen again disengages its carbon, and completes its azotification; perhaps even the cutaneous organ answers similar purposes to the lymphatic system, as the pulmonary organ may effect to the sanguiferous system.

The animalization of alimentary substance, therefore, takes place principally by the loss of carbon, which is replaced by azote in animal fluids. These support themselves in a proper state, for, as they are continually losing the carbonic principle in the intestinal, pulmonary, and cutaneous combinations, they would be too much animalized if a newly-formed chyle were not to attract the excess of azote. This theory is admitted, by its author, not to account for the formation of phosphoric salts, adeps, and abundance of other productions; but without adopting it *in toto*, we are induced to conclude, from the experiments and observations on which it is established, that the oxygen of the atmospheric air is one of the most powerful agents employed by nature to convert the aliments on which we subsist into our own peculiar substance.

Nutri′tum ungue′ntum. A composition of litharge, vinegar, and oil.

Nux aroma′tica. The nutmeg.

Nux aqua′tica. See *Trapa natans*.

Nux barbade′nsis. See *Jatropha curcas*.

Nux basi′lica. The walnut.

Nux bean. See *Guilandina moringa*.

Nux catha′rtica. The garden spurge.

Nux catha′rtica America′na. Se *Jatropha curcas*.

Nux I′ndica. The cocoa-nut.

Nux ju′glans. See *Juglans*.

Nux me′dica. The maldivian nut.

Nux mete′lla. The nux vomica.

NUX MOSCHA′TA. See *Myristica moschata*.

Nux myri′stica. See *Myristica moschata*.

Nux pe′rsica. The walnut.

Nux pista′cia. See *Pistacia vera*.

Nux pu′rgans. See *Jatropha curcas*.

Nux serapio′nis. St. Ignatius's bean.

Nux vo′mica. See *Strychnos*.

NYCTALO′PIA. (From νυξ, the night, and ωψ, an eye.) *Imbecillitas oculorum*, of Celsus. A defect in vision, by which the patient sees little or nothing in the day, but in the evening and night sees tolerably well. The proximate cause is various:

1. From a periodical amaurosis, or gutta serena, when the blind paroxysm begins in the morning and terminates in the evening.

2. From too great a sensibility of the retina, which cannot bear the meridian light. See *Photophobia*.

3. From an opaque spot in the middle of the crystalline lens. When the light of the sun in the meridian contracts the pupil, there is blindness; about evening, or in more obsure places, the pupil dilates, hence the rays of light pass through the limbus of the crystalline lens.

4. From a disuse of light; thus persons who are educated in obscure prisons see nothing immediately in open meridian light; but by degrees their eyes are accustomed to distinguish objects in day-light.

5. From an immoveable mydriasis; for in this instance the pupil admits too great a quantity of light, which the immobile pupil cannot moderate; hence the patient, in a strong light, sees little or nothing.

6. From too great a contraction of the pupil. This admits not a sufficiency of lucid rays, in bright light, but towards night the pupil dilates more, and the patient sees better.

7. *Nyctalopia endemica*. A whole people have been nyctalopes, as the Æthiopians, Africans, Americans, and Asiatics. A great flow of tears are excreted all the day from their eyes; at night they see objects.

8. From a commotion of the eye; from which a man in the night saw all objects distinctly.

Nycto'basis. (From νυξ, the night, and βαινω, to go.) Walking in the sleep.

NY'MPHÆ. (From νυμφα, a water-nymph; so called because it stands in the water-course.) *Alæ internæ minores clitoridis. Colliculum. Collicula. Myrtocheilides. Labia minora.* Two membranous folds, situated within the labia majora, at the sides of the entrance of the vagina uteri.

NYMPHÆ'A. (From νυμφα, a water-nymph; because it grows in watery places.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.* The water-lily.

Nymphæ'a a'lba. *Leuconymphæa. Nenuphar. Micro-leuconymphæa.* White water-lily. This beautiful plant, *Nymphæa alba,* of Linnæus, was formerly employed medicinally as a demulcent, and slightly anodyne remedy. It is now laid aside.

Nymphæ'a glandi'fera. *Nymphæa Indica,* and *Madraspatana.* Names for the faba Ægyptia.

Nymphæ'a lu'tea. *Nymphæa major lutea,* of Caspar Bauhin. Yellow water-lily. *Nymphæa lutea,* of Linnæus. This beautiful plant was employed formerly with the same intentions as the white water-lily, and, like it, is now fallen into disuse. Lindestolpe informs us, that, in some parts of Sweden, the roots, which are the strongest part, were, in times of scarcity, used as food, and did not prove unwholesome.

Nymphæ'a lo'tus. The Egyptian lotus. An aquatic plant, a native of both Indies. The root is conical, firm, about the size of a middling pear, covered with a blackish bark, and set round with fibres. It has a sweetish taste, and, when boiled or roasted, becomes as yellow within as the yolk of an egg. The plant grows in abundance on the banks of the Nile, and is there much sought after by the poor, who, in a short time, collect enough to supply their families with food for several days.

Nymphæ'a nelu'mbo. *Faba Ægyptiaca. Cyamus Ægyptiacus. Nymphæa Indica.* The pontic, or Ægyptian bean. The fruit of the *nymphæa nelumbo,* of Linnæus, which grows on marshy grounds in Egypt, and some of the neighbouring countries. It is eaten either raw or boiled, and is a tonic and astringent.

Nyhphoi'des. (From νυμφαια, the water-lily, and ειδος, likeness.) A herb resembling the water-lily.

NYMPHOMA'NIA. (From νυμφα, nympha, and μανια, madness.) *Furor uterinus.* Called by the Arabians, *Acrai. Brachuna. Arascon. Arsatum. Œstromania.* A genus of disease in the class *Locales,* and order *Dysorexiæ,* of Cullen, characterized by excessive and violent desire for coition in women. The effects, as described by Juvenal, in his sixth satire, are most humiliating to human nature. It acknowledges the same causes as satyriasis; but as females, more especially in warm climates, have a more irritable fibre, they are apt to suffer more severely than the males.

It is a species of madness, or an high degree of hysterics. Its immediate cause is a preternatural irritability of the uterus and pudenda of women, or an unusual acrimony of the fluids in these parts. Its presence is known by the wanton behaviour of the patient; she speaks and acts with unrestrained obscenity, and, as the disorder increases, she scolds, cries, and laughs, by turns. While reason is retained, she is silent and seems melancholy, but her eyes discover an unusual wantonness. The symptoms are better or worse until the greatest degree of the disorder approaches, and then, by every word and action, her condition is too manifest.

NYMPHOTO'MIA. (From νυμφα, the nympha, and τεμνω, to cut.) The operation of removing the nympha when too large.

NYSTA'GMUS. (From νυϛαω, to sleep.) A twinkling of the eyes, such as happens when a person is very sleepy. Authors also define nystagmus to be an involuntary agitation of the oculary bulb. It is known by the instability or involuntary and constant motions of the globe of the eye, from one canthus to another, or in some other directions. Sometimes it is accompanied with an hippus, or an alternate and repeated dilatation and constriction of the pupil. The species are, 1. Nystagmus, from fear. This agitation is observed under the operation for the cataract; and it is checked by persuasion, and waiting a short space of time. 2. Nystagmus, from sand or small gravel, falling in the eye. 3. Nystagmus, from a catarrh, which is accompanied with much inflammation. 4. Nystagmus, from saburra in the primæ viæ, as is observed in infants afflicted with worms, and is known by the signs of saburra. 5. Nystagmus symptomaticus, which happens in hysteric, epileptic, and sometimes in pregnant persons, and is a common symptom accompanying St. Vitus's dance.

O.

O*ak.* See *Quercus.*

Oak of Jerusalem. See *Chenopodium botrys.*

Oak, sea. See *Fucus vesiculosus.*

Oak, willow-leaved. See *Quercus Phellos.*

Oat. See *Avena.*

Obelæ′a. (From οϐελος, a dart, or a spit.) *Obelæa sagittalis,* an epithet for the sagittal suture of the skull.

Obeliscothe′ca. (From οϐελισκος, an obelisk, and θηκα, a bag; so called from the shape of its seed-bags.) The dwarf American sun-flower.

Oblesion. (From *ob,* against, and *lædo,* to hurt.) An injury done to any part.

Obli′quus asce′ndens abdo′minis. See *Obliquus internus abdominis.*

Obli′quus asce′ndens inte′rnus. See *Obliquus internus abdominis.*

Obli′quus au′ris. See *Laxator tympani.*

Obli′quus ca′pitis infe′rior. See *Obliquus inferior capitis.*

Obli′quus ca′pitis supe′rior. See *Obliquus superior capitis.*

Obli′quus desce′ndens abdo′minis. See *Obliquus externus abdominis.*

Obli′quus desce′ndens exte′rnus. See *Obliquus externus abdominis.*

Obli′quus exte′rnus. See *Obliquus externus abdominis.*

OBLI′QUUS EXTE′RNUS ABDO′MINIS. This muscle, which is so named by Morgagni, Albinus, and Winslow, is the *Obliquus descendens,* of Vesalius and Douglas, and the *Obliquus major,* of Haller, and some others. By Dumas it is named *Iliopubicosto-abdominal.* It is a broad, thin muscle, fleshy posteriorly, and tendinous in its middle and lower part, and is situated immediately under the integuments, covering all the other muscles of the lower belly. It arises from the lower edges of the eight, and sometimes, though rarely, of the nine inferior ribs, not far from their cartilages, by as many distinct fleshy portions, which indigitate with corresponding parts of the serratus major anticus, and the latissimus dorsi. From these several origins, the fibres of the muscle descend obliquely forwards, and soon degenerate into a broad and thin aponeurosis, which terminates in the linea alba. About an inch and a half above the pubes, the fibres of this aponeurosis separate from each other, so as to form an aperture, which extends obliquely inwards and forwards, more than an inch in length, and is wider above than below, being nearly of an oval figure. This is what is sometimes, though erroneously, called the *ring* of the abdominal muscles, for it belongs only to the external oblique, there being no such opening either in the obliquus internus, or in the transversalis, as some writers, and particularly Douglas and Cheselden, would give us to understand. This opening, or ring, serves for the passage of the spermatic vessels in men, and of the round ligament of the uterus in women, and is of a larger size in the former than in the latter The two tendinous portions, which, by their separation, form this aperture, are called the *columns* of the ring. The anterior, superior, and inner column, which is the broadest and thickest of the two, passes over the symphysis pubis, and is fixed to the opposite os pubis; so that the anterior column of the right obliquus externus, intersects that of the left, and is, as it were, interwoven with it, by which means their insertion is strengthened, and their attachment made firmer. The posterior, inferior, and exterior column, approaches the anterior one as it descends, and is fixed behind and below it to the os pubis of the same side. The fibres of that part of the obliquus externus, which arises from the two inferior ribs, descend almost perpendicularly, and are inserted, tendinous and fleshy, into the outer edge of the anterior half of the spine of the ilium. From the anterior superior spinous process of that bone, the external oblique is stretched tendinous to the os pubis, forming what is called *Poupart*'s, and sometimes *Fallopius*'s, ligament, Fallopius having first described it. Winslow, and many others name it the *inguinal* ligament. But, after all, it has no claim to this name, it being nothing more than the tendon of the muscle, which is turned or folded inwards at its interior edge. It passes over the blood-vessels of the lower extremity, and is thickest near the pelvis; and in women, from the greater size of the pelvis, it is longer and looser than in men. Hence we find that women are most liable to crural herniæ; whereas men, from the greater size of the ring of the external oblique, are most subject to the inguinal. From this ligament, and from that part of the tendon which forms the ring, we observe a detachment of tendinous fibres, which are lost in the *fascia lata* of the thigh. This may, in some measure, account for the pain which, in cases of strangulated herniæ, is felt when the patient stands upright, and which is constantly relieved upon bending the thigh upwards. This muscle serves to draw down the ribs in expiration; to bend the trunk forwards when both muscles act, or to bend it obliquely to one side, and, perhaps, to turn it slightly upon its axis, when either acts singly; it also raises the pelvis obliquely when the ribs are fixed; it supports and compresses the abdominal viscera, assists in the evacuation of the urine and fæces, and is likewise useful in parturition.

Obli'quus infe'rior. See *Obliquus inferior capitis*, and *Obliquus inferior oculi*.

OBLI'QUUS INFE'RIOR CAPITIS. This muscle, which is the *obliquus inferior sive major*, of Winslow, and the *Spini axoido-tracheli-altoidien*, of Dumas, is larger than the obliquus superior capitis. It is very obliquely situated between the two first vertebræ of the neck. It arises tendinous and fleshy from the middle and outer side of the spinous process of the second vertebra of the neck, and is inserted tendinous and fleshy into the lower and posterior part of the transverse process of the first vertebra. Its use is to turn the first vertebra upon the second, as upon a pivot, and to draw the face towards the shoulder.

OBLI'QUUS INFE'RIOR O'CULI. *Obliquus minor oculi*, of Winslow, and *Maxillo scleroticien*, of Dumas. An oblique muscle of the eye, that draws the globe of the eye forwards, inwards, and downwards. It arises by a narrow beginning from the outer edge of the orbitar process of the superior maxillary bone, near its junction with the lachrymal bone, and running obliquely outwards, is inserted into the sclerotic membrane of the eye.

Obli'quus infe'rior si've ma'jor. See *Obliquus inferior capitis*.

Obli'quus inte'rnus. See *Obliquus internus abdominis*.

OBLI'QUUS INTE'RNUS ABDO'MINIS. *m. acclivis*. This muscle, which is the *Obliquus ascendens*, of Vesalius, Douglas, and Cowper, the *Obliquus minor*, of Haller, the *Obliquus internus*, of Winslow, the *Obliquus ascendens internus*, of Innes, and the *Ilio-lumbo-costi abdominal*, of Dumas, is situated immediately under the external oblique, and is broad and thin like that muscle, but somewhat less considerable in its extent. It arises from the spinous processes of the three inferior lumbar vertebræ, and from the posterior and middle part of the os sacrum, by a thin tendinous expansion, which is common to it and to the serratus posticus inferior; by short tendinous fibres, from the whole spine of the ilium, between its posterior tuberosity and its anterior and superior spinous process; and from two-thirds of the posterior surface of what is called Fallopius's ligament, at the middle of which we find the round ligament of the uterus in women, and the spermatic vessels in men, passing under the thin edge of this muscle; and in the latter, it likewise sends off some fibres, which descend upon the spermatic chord, as far as the tunica vaginalis of the testis, and constitute what is called the *cremaster* muscle, which surrounds, suspends, and compresses the testicle. From these origins, the fibres of the internal oblique run in different directions; those of the posterior portion ascend obliquely forwards, the middle ones become less and less oblique, and, at length, run in an horizontal direction, and those of the anterior portion extend obliquely downwards. The first of these are inserted, by very short tendinous fibres, into the cartilages of the fifth, fourth, and third of the false ribs; the fibres of the second, or middle portion, form a broad tendon, which, after being inserted into the lower edge of the cartilage of the second false rib, extends towards the linea alba, and separates into two layers; the anterior layer, which is the thickest of the two, joins the tendon of the obliquus externus, and runs over the two upper thirds of the rectus muscle, to be inserted into the linea alba; the posterior layer runs under the rectus, adheres to the anterior surface of the tendon of the transversalis, and is inserted into the cartilages of the first of the false, and the last of the true ribs, and likewise into the linea alba. By this structure we may perceive that the greater part of the rectus is inclosed, as it were, in a sheath. The fibres of the anterior portion of the internal oblique, or those which arise from the spine of the ilium and the ligamentum Fallopii, likewise form a broad tendon, which, instead of separating into two layers, like that of the other part of the muscle, runs over the lower part of the rectus, and adhering to the under surface of the tendon of the external oblique, is inserted into the fore-part of the pubes. This muscle serves to assist the obliquus externus; but it seems to be more evidently calculated than that muscle is to draw the ribs downwards and backwards. It likewise serves to separate the false ribs from the true ribs, and from each other.

Obli'quus ma'jor abdo'minis. See *Obliquus externus abdominis*.

Obli'quus ma'jor ca'pitis. See *Obliquus inferior capitis*.

Obli'quus ma'jor o'culi. See *Obliquus superior oculi*.

Obli'quus mi'nor abdo'minis. See *Obliquus internus abdominis*.

Obli'quus mi'nor ca'pitis. See *Obliquus superior capitis*.

Obli'quus mi'nor o'culi. See *Obliquus inferior oculi*.

OBLI'QUUS SUPE'RIOR CA'PITIS. Riolanus, who was the first that gave particular names to the oblique muscles of the head, called this muscle *obliquus minor*, to distinguish it from the inferior, which, on account of its being much larger, he named *obliquus major*. Spigelius afterwards distinguished the two, from their situation with respect to each other, into *superior* and *inferior*; and in this he is followed by Cowper and Douglas. Winslow retains both names. Dumas calls it *Trachelo-altoido-occipital*. That used by Albinus is here adopted. This little muscle, which is nearly of the same shape as the *recti capitis*, is situated laterally between the occiput and the first vertebra of the neck, and is covered by the complexus and the upper part of the splenius. It arises, by a short thick tendon, from the upper and posterior part of the transverse process of the first vertebra of the neck, and, ascending obliquely inwards and backwards, becomes broader, and is inserted, by a broad flat tendon, and some few fleshy fibres, into the os occipitis, behind the back part of the mastoid process, under the insertion of the complexus and splenius, and a little above that of the rectus major. The use of this muscle is to draw the head backwards, and perhaps to assist in its rotatory motion.

OBLI'QUUS SUPE'RIOR O'CULI. *Trochlearis*. *Obliquus major*, of Winslow, and *Optico-trochlei-scleroticien*, of Dumas. An oblique muscle of the eye, that rolls the globe of the eye, and turns the pupil downwards and outwards. It arises like the straight muscles of the eye from the edge of the foramen opticum at the bottom of the orbit, between the rectus superior and rectus internus; from thence runs straight along the papyraceous portion of the ethmoid bone to the upper part of the orbit, where a cartilaginous trochlea is fixed to the inside of the internal angular process of the os frontis, through which its tendon passes, and runs a little downwards and outwards, enclosed in a loose membranaceous sheath, to be inserted into the sclerotic membrane.

Obli'quus supe'rior si've mi'nor. See *Obliquus superior capitis*.

Obli'quus supe'rior si've trochlea'ris. See *Obliquus superior oculi*.

Obsidia'num. A species of glass so called from its resemblance to a kind of stone, which one Obsidius discovered in Ethiopia, of a very black colour, though sometimes pellucid and of a muddy water. Pliny says also, that *obsidianum* was a sort of colour with which vessels were glazed. Hence the name is applied, by Libavius, to glass of antimony.

OBSTETRIC. (*Obstetricus*; from *obstetrix*, a nurse.) Belonging to midwifery.

OBSTIPA'TIO. (From *obstipo*, to stop up.) Costiveness. A genus of disease in the class *Locales*, and order *Epischeses*, of Cullen, comprehending three species:

1. *Obstipatio debilium*, in weak and commonly dyspeptic persons.

2. *Obstipatio rigidorum*, in persons of rigid fibres, and a melancholic temperament.

3. *Obstipatio obstructorum*, from obstructions. See *Colica*.

Obstrue'ntia. (From *obstruo*, to shut up.) Medicines which close the orifices of the ducts, or vessels.

Obstupefacie'ntia. (From *obstupefacio*, to stupefy.) Narcotics.

Obtunde'ntia. (From *obtundo*, to make blunt.) Substances which sheath or blunt irritation, and are much the same as demulcents. They consist chiefly of bland, oily, or mucilaginous matters, which form a covering on inflamed and irritable surfaces, particularly those of the stomach, lungs, and anus.

OBTURA'TOR EXTE'RNUS. *Extra-pelvio-pubi-trochanterien*, of Dumas. This is a small flat muscle, situated obliquely at the upper and anterior part of the thigh, between the pectinalis and the fore-part of the foramen thyroideum, and covered by the adductor brevis femoris. It arises tendinous and fleshy from all the inner half of the circumference of the foramen thyroideum, and likewise from part of the obturator ligament. Its radiated fibres collect and form a strong roundish tendon, which runs outwards, and, after adhering to the capsular ligament of the joint, is inserted into a cavity at the inner and back part of the root of the great trochanter. The chief uses of this muscle are to turn the thigh obliquely outwards, to assist in bending the thigh, and in drawing it inwards. It likewise prevents the capsular ligament from being pinched in the motions of the joint.

OBTURA'TOR INTE'RNUS. *Marsupialis, seu obturator internus*, of Douglas. *Marsupialis seu bursalis*, of Cowper, and *Intra-pelvio-trochanterien*, of Dumas. A considerable muscle, a great part of which is situated within the pelvis. It arises, by very short tendinous fibres, from somewhat more than the upper half of the internal circumference of the foramen thyroideum of the os innominatum. It is composed of several distinct fasciculi, which terminate in a roundish tendon that passes out of the pelvis, through the niche that is between the spine and the tuberosity of the ischium, and, after running between the two portions of the gemini, which inclose it as in a sheath, is inserted into the cavity at the root of the great trochanter, after adhering to the adjacent part of the capsular ligament of the joint. This muscle rolls the os femoris obliquely outwards, by pulling it towards the ischiatic niche, upon the cartilaginous surface of which its tendon, which is surrounded by a membranous sheath, moves as upon a pulley.

OBTURA'TOR NERVE. A nerve of the thigh, that is lost upon its inner muscles.

OCCIPITAL BONE. *Os occipitis*. *Os memoriæ*. *Os nervosum*. *Os basilare*. This bone which forms the posterior and inferior part of the skull, is of an irregular figure, convex on the outside and concave internally. Its external surface, which is very irregular, serves for the attachment of several muscles. It affords several inequalities, which sometimes form two semicircular hollows separated by a scabrous ridge. The inferior portion of the bone is stretched forwards in form of a wedge, and hence is called the *cuneiform* process, or basilary process. At the base of this process, situated obliquely on each side of the foramen magnum, are two flat, oblong protuberances, named *condyles*. They are covered with cartilage, and serve for the articulation of the head with the first vertebra of the neck. In the inferior portion of this bone, at the basis of the cranium, and immediately behind the cuneiform process, we observe a considerable hole, through which the medulla oblongata passes into the spine. The nervi accessorii, the vertebral arteries, and sometimes the vertebral veins likewise, pass through it. Man being designed for an erect posture, this foramen magnum is found nearly in the middle of the basis of the human cranium, and at a pretty equal distance from the posterior part of the occiput, and the anterior part of the lower jaw; whereas in quadrupeds it is nearer the back part of the occiput. Besides this hole, there are four other smaller foramina, viz. two before, and two behind the condyles. The former serve for the transmission of the ninth pair of nerves, and the two latter for the veins which pass from the external parts of the head to the lateral sinuses. On looking over the internal surface of the os occipitis, we perceive the appearance of a cross, formed by a very prominent ridge, which rises upwards from near the foramen magnum, and by two transverse sinuosities, one on each side of the ridge. This cross occasions the formation of four fossæ, two above and two below the sinuosities. In the latter are placed the lobes of the cerebellum, and in the former the posterior lobes of the brain. The two sinuosities serve to receive the lateral sinuses. In the upper part of this bone is seen a continuation of the sinuosity of the longitudinal sinus; and at the basis of the cranium we observe the inner surface of the cuneiform process made concave, for the reception of the medulla oblongata. The occipital bone is thicker and stronger than any of the other bones of the head, except the petrous part of the ossa temporum; but it is of unequal thickness. At its lateral and inferior parts, where it is thinnest, it is covered by a great number of muscles. The reason for so much thickness and strengh in this bone, seems to be, that it covers the cerebellum, in which the least wound is of the utmost consequence; and that it is, by its situation, more liable to be fractured by falls than any other bone of the cranium. For, if we fall forwards, the hands are naturally put out to prevent the forehead's touching the ground; and if on one side, the shoulders in a great measure protect the sides of the head; but if a person fall backwards, the hind part of the head consequently strikes against the earth, and that too with considerable violence. Nature therefore has wisely constructed this bone so as to be capable of the greatest strength at its upper part, where it is the most exposed to injury. The os occipitis is joined, by means of the cuneiform process, to the sphenoid bone, with which it often ossifies, and makes but one bone in those who are advanced in life. It is connected to the parietal bones by the lambdoidal suture, and to the temporal bones by the additamentum of the temporal suture. The head is likewise united to the trunk by means of this bone. The two condyles of the occipital bone are received into the superior oblique processes of the atlas, or first vertebra of the neck, and it is by means of this articulation that a certain degree of motion of the head backwards and forwards is performed. But it allows only very little motion to either side; and still less of a circular motion, which the head obtains principally by the circumvolution of the atlas on the second vertebra, as is described more particularly in the account of the vertebræ. In the fœtus, the os occipitis is divided by an unossified cartilaginous substance into four parts. One of these, which is the largest, constitutes all that portion of the bone which is above the foramen magnum; two others, which are much smaller, compose the inside of the foramen magnum, and include the condyloid processes; and the fourth is the cuneiform process. This last is sometimes not completely united with the rest, so as to form one bone, before the sixth or seventh year.

Occipita'lis. See *Occipito-frontalis.*

OCCIPITO-FRONTA'LIS. *Digastricus cranii. Epicranius*, of Albinus. *Frontalis et occipitalis*, of Winslow and Cowper, and *Occipito-frontal*, of Dumas. A single, broad, digastric muscle, that covers the cranium, pulls the skin of the head backwards, raises the eye-brows upwards, and at the same time, draws up and wrinkles the skin of the forehead. It arises from the posterior part of the occiput, goes over the upper part of the os parietale and os frontis, and is lost in the eye-brows.

O'CCIPUT. The hinder part of the head. See *Caput.*

Occult quality. A term that has been much used by writers that had not clear ideas of what they undertook to explain; and which served therefore only for a cover to their ignorance.

Occult diseases is likewise from the same mint as the former, *occultus* signifying hidden, and, therefore, nothing can be understood, when a person speaks of a hidden disease, but that it is a disease he does not understand.

Oche'ma. (From οχεω, to carry.) A vehicle, or thin fluid.

Ocheteu'ma. (From οχετος, a duct.) The nostril.

O'chetus. (From οχεω, to convey.) A canal, or duct. The urinary or abdominal passages.

O'cheus. (From οχεω, to carry.) The bag of the scrotum.

O'chra. (From ωχρος, pale; so named because it is often of a pale colour.)

1. Ochre. *Minera ferri lutea vel rubra.* An argillaceous earth impregnated with iron of a red or yellow colour. The Armenian bole, and other earths, are often adulterated with ochre.

2. The fore-part of the tibia.

O'chrus. (From ωχρος, pale; so called from the pale muddy colour of its flowers.) A leguminous plant, or kind of pulse.

Ochtho'des. (From οχθος, importing the tumid lips of ulcers, callous, tumid.) An epithet for ulcers, whose lips are callous and tumid, and consequently difficult to heal.

Ocima'strum. (Dim. of *ocimum*, basil.) Wild white campion, or basil.

O'CIMUM. (From ωκυς, swift; so called from its quick growth.) *Ocymum.* The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.*

O'cimum basi'licum. The systematic name of the common or citron basil. *Basilicum.* The plant which bears this name in the pharmacopœias, is the *Ocimum, foliis ovatis glabris; calycibus ciliatis,* of Linnæus. It is supposed to possess nervine qualities, but is seldom employed but as a condiment to season high dishes, to which it imparts a grateful odour and taste.

O'cimum caryophylla'tum. *Ocimum minimum* of Caspar Bauhin, and Linnæus. Small or bush basil. This plant is mildly balsamic. Infusions are drank as tea, in catarrhous and uterine disorders, and the dried leaves are made into cephalic, and sternutatory powders. They are, when fresh, very juicy, of a weak aromatic and very mucilaginous taste, and of a strong and agreeable smell improved by drying.

Octa'na. (From *octo*, eight.) An erratic intermitting fever, which returns every eighth day.

Octa'vus hu'meri. The *Teres minor.*

Octa'vus hu'meri placenti'ni. The *Teres minor.*

Ocula'res commu'nes. A name for the nerves called *Motores oculorum.*

Ocula'ria. (From *oculus*, the eye; so called from its uses in disorders of the eye.) See *Euphrasia.*

O'culi addu'ctor. See *Rectus internus oculi.*

O'culi atto'llens. See *Rectus superior oculi.*

O'culi cancro'rum. See *Cancer.*

O'culi depre'ssor. See *Rectus inferior oculi.*

O'culi eleva'tor. See *Rectus superior oculi.*

O'culi leva'tor. See *Rectus superior oculi.*

O'culi obli'quus infe'rior. See *Obliquus inferior oculi.*

O'culi obli'quus ma'jor. See *Oliquus superior oculi.*

O'culi obli'quus mi'nor. See *Obliquus inferior oculi.*

O'culus bovi'nus. See *Hydrophthalmia.*

O'culus bo'vis. See *Chrysanthemum leucanthemum.*

O'culus bu'bulus. See *Hydrophthalmia.*

O'culus chri'sti. Austrian flea-bane; a species of *Inula.*

O'culus elephanti'nus. A name given to *Hydrophthalmia.*

O'culus ge'nu. The knee-pan.

O'culus la'chrymans. The *Epiphora.*

O'culus mu'ndi. A species of *Opal*, generally of a yellowish colour. By lying in water it becomes of an amber-colour, and also transparent.

Odaxi'smos. (From οδους, a tooth.) A biting sensation, pain, or itching in the gums.

Odontago'gos. (From οδους, a tooth, and αγω, to draw.) The name of an instrument to draw teeth, one of which, made of lead, Forrestus relates to have been hung up in the temple of Apollo, denoting, that such an operation ought not to be made, but when the tooth was loose enough to draw with so slight a force as could be applied with that.

Odonta'gra. (From οδους, a tooth, and αγρα, a seizure.)

1. The gout in the teeth.

2. A tooth-drawer.

ODONTA'LGIA. (From οδους, a tooth, and αλγος, pain.) The tooth-ach. This well-known disease makes its attack by a most violent pain in the teeth, most frequently in the molares, more rarely in the incisorii, reaching sometimes up to the eyes, and sometimes backwards into the cavity of the ear. At the same time, there is a manifest determination to the head, and a remarkable tension and inflation of the vessels takes place, not only in the parts next to that where the pain is seated, but over the whole head.

The tooth-ach is sometimes merely a rheumatic affection, arising from cold, but more frequently from a carious tooth. It is also a symptom of pregnancy, and takes place in some nervous disorders. It may attack persons at any period of life, though it is most frequent in the young and plethoric. From the variety of causes which may produce this affection, it has been named by authors odontalgia cariosa, scorbutica, catarrhalis, arthritica, gravidarum, hysterica, stomachica, and rheumatica.

O'DONTALGICA. (*Medicamenta odontalgica;* from οδονταλγια, the tooth-ach.) Medicines which relieve the tooth-ach.

Many empirical remedies have been proposed for the cure of the tooth-ach, but have not in any degree answered the purpose. When the affection is purely rheumatic, blistering behind the ear will almost always remove it; but when it proceeds from a carious tooth, the pain is much more obstinate. In this case it has been recommended to touch the pained part with a hot iron, or with oil of vitriol, in order to destroy the aching nerve; to hold spirits in the mouth; to put a drop of oil of cloves into the hollow of the tooth, or a pill made of camphor, opium, and oleum caryophylli. Others recommend gum mastich, dissolved in oleum terebinthinæ, applied to the tooth upon a little cotton. The great Boerhaave is said to have applied camphor, opium, oleum caryophylli, and alkohol, upon cotton. The caustic oil which may be collected from writing paper, rolled up tight, and set fire to at the end, will sometimes destroy the exposed nervous substance of a hollow tooth. The application of radix pyrethri by its power of stimulating the salivary glands, either in substance or in tincture, has also been attended with good effects. But one of the most useful applications of this kind, is strong nitrous acid, diluted with three or four times its weight of spirit of wine, and introduced into the hollow of the tooth, either by means of an hair pencil or a little cotton. When the constitution has had some share in the disease, the Peruvian bark has been recommended, and perhaps with much justice, on account of its tonic and antiseptic powers. When the pain is not fixed to one tooth, leeches applied to the gum are of great service. But very often all the foregoing remedies will fail, and the only infallible cure is to draw the tooth.

ODONTI'ASIS. (From οδοντιαω, to put forth the teeth.) Dentition, or cutting teeth.

Odo'ntica. (From οδους, a tooth.) Remedies for pains in the teeth.

Odontirrhœ'a. (From οδους, a tooth, and ρεω, to flow.) Bleeding from the socket of the jaw, after drawing a tooth.

Odo'ntis. (From οδους, a tooth; so called because its decoction was supposed useful in relieving the tooth-ach.) *Odontitis.* A species of lychnis.

Odonti'tis. See *Odontis.*

Odontogly'phum. (From οδους, a tooth, and γλυφω, to scrape.) An instrument for scaling and scraping the teeth.

ODONTOID. (*Odontoides;* from οδους, a tooth, and ειδος, form, because it is shaped like a tooth.) Tooth-like. A process of the second vertebra of the neck is so called. See *Dentatus.*

Odontoli'thos. (From οδους, a tooth, and λιθος, a stone.) The tartar, or stony crust upon the teeth.

Odontophy'ia. (From οδους, a tooth, and φυω, to grow.) Dentition, or cutting teeth.

Odontotri'mma. (From οδους, a tooth, and τριβω, to wear away.) A dentrifrice, or medicine, to clean the teeth.

ODORIFEROUS GLANDS. *Glandulæ odoriferæ.* These glands are situated around the corona glandis of the male, and under the skin of the labia majora and nymphæ of females. They secrete a sebaceous matter, which emits a peculiar odour; hence their name.

Œ'a. (Οιη: from οιω, to bear; so named from its fruitfulness.) The service tree.

ŒCONOMY, ANIMAL. (From οικος, a house, and νομος, a law.) *Œconomia animalis.* The conduct of nature in preserving animal bodies is called the animal œconomy.

ŒDE'MA. (From οιδεω, to swell.) A synonym of anasarca. See *Anasarca.*

Œdemato'des. Like to an œdema.

Œdemosa'rca. (From οιδημα, a swelling, and σαρξ, flesh.) A species of tumour mentioned by M. A. Severinus, of a middle nature, betwixt an *œdoma*, or soft tumour, and *sarcoma*, or hard tumour.

ŒNA'NTHE. (From οινος, wine, and ανθος, a flower; so called because its flowers smell like the vine.)

1. The botanical name of a genus of the umbelliferous plants. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the hemlock dropwort. *Œnanthe chærophylli foliis.*

Œna'nthe croca'ta. The hemlock dropwort. *Œnanthe chærophylli foliis,* of Linnæus. An active poison that has too often proved fatal, by being eaten in mistake instead of water-parsnep. The juice, nevertheless, cautiously exhibited, promises to be an efficacious remedy in inveterate scorbutic eruptions. The root of this plant is not unpleasant to the taste, and esteemed to be most deleterious of all the vegetables which this country produces. Mr. Howel, surgeon at Haverfordwest, relates, that "eleven French prisoners had the liberty of walking in and about the town of Pembroke. Three of them being in the fields a little before noon, dug up a large quantity of this plant, which they took to be wild celery, to eat with their bread and butter for dinner. After washing it, they all three ate, or rather tasted of the roots. As they were entering the town, without any previous notice of sickness at the stomach, or disorder in the head, one of them was seized with convulsions. The other two ran home, and sent a surgeon to him. The surgeon endeavoured first to bleed, and then to vomit him; but those endeavours were fruitless, and he died presently. Ignorant of the cause of their comrade's death, and of their own danger, they gave of these roots to the other eight prisoners, who ate of them with their dinner. A few minutes afterwards the remaining two who gathered the plants were seized in the same manner as the first, of which one died; the other was bled, and a vomit, with great difficulty, forced down on account of his jaws being, as it were, locked together. This operated, and he recovered, but was some time affected with dizziness in his head, though not sick; or the least disordered in the stomach. The other eight being bled and vomited immediately were soon well." At Clonmell, in Ireland, eight boys mistaking this plant for water-parsnep, ate plentifully of its roots. About four or five hours after the eldest boy became suddenly convulsed, and died; and before the next morning four of the other boys died in a similar manner. Of the other three, one was maniacal several hours, another lost his hair and nails, but the third escaped unhurt. Stalpaart Vander Wiel mentions two cases of the fatal effects of this root; these, however, were attended with great heat in the throat and stomach, sickness, vertigo, and purging; they both died in the course of two or three hours after eating the root. Allen, in his Synopsis Medicinæ, also relates that four children suffered greatly by eating this poison. In these cases great agony was experienced before the convulsions supervened; vomitings likewise came on, which were encouraged by large draughts of oil and warm water, to which their recovery is ascribed. The late Sir William Watson, who refers to the instances here cited, also says, that a Dutchman was posioned by the leaves of the plant boiled in pottage. It appears, from various authorities, that most brute animals are not less affected by this poison than man; and Mr. Lightfoot informs us, that a spoonful of the juice of this plant given to a dog, rendered him sick and stupid; but a goat was observed to eat the plant with impunity. The great virulence of this plant has not, however, prevented it from being taken medicinally. In a letter from Dr. Poulteney to Sir William Watson, we are told that a severe and inveterate cutaneous disorder was cured by the juice of the root, though not without exciting the most alarming symptoms. Taken in the dose of a spoonful, in two hours afterwards, the head was affected in a very extraordinary manner, followed with violent sickness and vomiting, cold sweats, and rigors; but this did not deter the patient from continuing the medicine, in somewhat less doses, till it effected a cure.

Œna′nthe chærophy′lli fo′liis. See *Œnanthe crocata.*

Œna′nthe cicu′tæ fa′cie lobe′lli. The *Œnanthe crocata.*

Œna′rea. (Οιναρεη: from *οἰναρα*, the cuttings of vines.) The ashes prepared of the twigs, &c. of vines.

Œnelæ′um. (From *οἰνὸς*, wine, and *ελαιον*, oil.) A mixture of oil and wine.

Œno′gala. (From *οινος*, wine, and *γαλα*, milk.) A sort of potion made of wine and milk. According to some, it is wine as warm as new milk.

Œno′garum. (From *οινος*, wine, and *γαρον*, garum.) A mixture of wine and garum.

Œno′meli. (From *οἰνὸς*, wine, and *μελι*, honey.) Mead, or wine, made of honey, or sweetened with honey.

Œno′plia. (From *οινος*, wine.) The great jubeb-tree, the juice of whose fruit is like that of the grape.

Œnosta′gma. (From *οἰνὸς*, wine, and *ϛαζω*, to distil.) Spirit of wine.

Œno′thera. (From *οινος*, wine; so called because its dried roots smell like wine.) A species of lysimachia.

Œ′nus a′nthinos. (From *ανθος*, a flower.) Flowery wine. Galen says it is *Œnos anthosmias*, or wine impregnated with flowers, in which sense it is an epithet for the *Cyceon.*

Œ′nus antho′smias. (From *ανθος*, a flower, and *ὀσμὴ*, a smell.) Sweet-scented wines.

Œ′nus apodæ′dus. Wine in which the dais, or tæda hath been boiled.

Œ′nus apeze′smenus. A wine heated to a great degree, and prescribed among other things, as garlic, salt, milk, and vinegar.

Œ′nus deu′terus. (*Δευτερος*, second.) Wines of the second pressing.

Œ′nus diacheo′menus. Wine diffused in larger vessels, cooled and strained from the lees, to render it thinner and weaker; wines thus drawn off are called *saccus*, and *saccata*, from the bag through which they are strained.

Œ′nus galacto′des. (From *γαλα*, milk.) Wine with milk, or wine made as warm as new milk.

Œ′nus ma′lacus. *Œnus malthacus.* Soft wine. Sometimes it means weak and thin, opposed to strong wine; or mild in opposition to austere.

Œ′nus meli′chroos. Wine in which is honey.

Œ′nus œno′des. Strong wine.

Œ′nus straphi′dios leu′cos. White wine made from raisins.

Œ′nus tethala′smenos. Wine mixed with sea-water.

Œsophagæ′us. (From *οισοφαγος*, the

gullet.) The muscle forming the sphincter œsophagi.

Œsophagi'smus. (From οἰσοφαγος, the gullet.) Difficult swallowing, from spasm.

ŒSO'PHAGUS. (From οιω, to carry, and φαγω, to eat; because it carries the food into the stomach.) The membranous and muscular tube that descends in the neck, from the pharynx to the stomach. It is composed of three tunics, or membranes, viz. a common, muscular, and mucous. Its arteries are branches of the œsophageal, which arises from the aorta. The veins empty themselves into the vena azygos. Its nerves are from the eighth pair and great intercostal; and it is every where under the internal or mucous membrane supplied with glands that separate the mucus of the œsophagus, in order that the masticated bole may readily pass down into the stomach.

Œstroma'nia. (From οιϛρος, the pudenda of a woman, and μαινομαι, to rage.) A furor uterinus.

Œ'STRUM VENE'REUM. (From *œstrus*, a gad-bee; because by its bite, or sting, it agitates cattle.) The venereal orgasm, or pleasant sensation experienced during coition.

Œ'sype. (From οϊς, a sheep, and ρυπος, sordes.) *Œsypos. Œsypum. Œsypus.* It frequently is met with in the ancient Pharmacy, for a certain oily substance, boiled out of particular parts of the fleeces of wool, as what grows on the flank, neck, and parts most used to sweat.

O'ffa a'lba. (From *phath*, a fragment, Heb.) Van Helmont thus calls the white coagulation which arises from a mixture of a rectified spirit of wine, and of urine; but the spirit of urine must be distilled from well fermented urine; and that must be well dephlegmated, else it will not answer.

OFFICINAL. (*Officinalis*; from *officina*, a shop.) Any medicine, directed by the colleges of physicians to be kept in the shops, is so termed.

Offusca'tio. The same as *Amaurosis.*

OIL. (*Oleum*; from *olea*, the olive; this name being at first confined to the oil expressed from the olive.) Oils are defined, by modern chemists, to be proper juices of a fat or unctuous nature, either solid or fluid, indissoluble in water, combustible with flame, and volatile in different degrees. They are never formed but by organic bodies; and all the substances in the mineral kingdom, which present oily characters, have originated from the action of vegetable or animal life. Oils are distinguished into fat, and essential oils; under the former head are comprehended oil of olives, almonds, rape, ben, linseed, hemp, cocoa, &c. Essential oils differ from fat oils by the following characters: their smell is strong and aromatic; their volatility is such that they rise with the heat of boiling water, and their taste is very acrid; they are likewise much more combustible than fat oils; they are obtained by pressure, distillation, &c. from strong-smelling plants, as that of peppermint, aniseed, caraway, &c. The use of fat oils in the arts, and in medicine, is very considerable; they are medicinally prescribed as relaxing, softening, and laxative remedies; they enter into many medical compounds, such as balsams, unguents, plasters, &c. and they are often used as food on account of the mucilage they contain. See *Olea.* Essential oils are employed as cordial, stimulant, and antispasmodic remedies.

Oil, ætherial. See *Oleum æthereum.*

Oil, almond. See *Amygdalus.*

Oil of allspice. See *Oleum pimentæ.*

Oil of amber. See *Oleum succini.*

Oil of carraway. See *Oleum carui.*

Oil, castor. See *Ricinus.*

Oil of chamomile. See *Oleum anthemidis.*

Oil of juniper. See *Oleum juniperi.*

Oil of lavender. See *Oleum lavendulæ.*

Oil of linseed. See *Oleum lini.*

Oil of mace. See *Oleum macis.*

Oil, olive. See *Olea europæa.*

Oil of origanum. See *Oleum origani.*

Oil, palm. See *Cocos butyracea.*

Oil of pennyroyal. See *Oleum pulegii.*

Oil of peppermint. See *Oleum menthæ piperitæ.*

Oil, rock. See *Petroleum.*

Oil of spearmint. See *Oleum menthæ viridis.*

Oil, sulphurated. See *Oleum sulphuratum.*

Oil of turpentine. See *Oleum terebinthinæ rectificatum.*

Ointment. See *Unguentum.*

O'LEA. The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

O'lea europæ'a. The systematic name of the plant from which the olive oil is obtained. *Oliva. Olea sativa. Olea foliis lanceolatis integerrimis, racemis axillaribus coarctatis,* of Linnæus. The olive-tree, in all ages, has been greatly celebrated, and held in peculiar estimation, as the bounteous gift of heaven; it was formerly exhibited in the religious ceremonies of the Jews, and is still continued as emblematic of peace and plenty. The varieties of this tree are numerous, distinguished not only by the form of the leaves, but also by the shape, size, and colour of the fruit; as the large Spanish olive, the small oblong Provence olive, &c. &c. These, when pickled, are well known to us by the names of Spanish and French olives, which are extremely grateful to many stomachs, and said to excite appetite and promote digestion; they are prepared from the green unripe fruit, which is repeatedly steeped in water, to which some quicklime or alkaline salt is added, in order to shorten the operation: after this, they are washed and preserved in a pickle of common salt and water, to which an aromatic is sometimes added. The principal consumption, however, of this fruit is in the preparation of the common sallad oil, or *oleum olivæ* of the pharmacopœias, which is obtained by grinding and pressing them when thoroughly ripe: the finer and purer oil issues first by gentle pressure, and the inferior sorts on heating what is left, and pressing it more strongly. The best olive oil is of a bright pale amber colour, bland to the taste, and without any smell: it becomes rancid by age, and sooner if kept in a warm situation. With regard to its utility, oil, in some shape, forms a considerable part of our food, both animal and vegetable, and affords much nourishment. With some, however, oily substances do not unite with the contents of the stomach, and are frequently brought up by eructation; this happens more especially to those whose stomachs abound with acid. — Oil, considered as a medicine, is supposed to correct acrimony, and to lubricate and relax the fibres; and, therefore, has been recommended internally to obviate the effects of various stimuli, which produce irritation, and consequent inflammation: on this ground it has been generally prescribed in coughs, catarrhal affections, and erosions. The oil of olives is successfully used in Switzerland against the *tænia osculis superficialibus*, and it is in very high estimation in this and other countries against nephritic pains, spasms, colic, constipation of the bowels, &c. Externally it has been found an useful application to bites and stings of various poisonous animals, as the mad dog, several serpents, &c. also to burns, tumours, and other affections, both by itself, or mixed in liniments or poultices. Oil rubbed over the body is said to be of great service in dropsies, particularly ascites. Olive oil enters several officinal compositions, and when united with water, by the intervention of alkali, is usually given in coughs and hoarsenesses.

Olea′men. (From *oleum*, oil.) A thin liniment composed of oils.

Olea′nder. (From *olea*, the olive-tree, which it resembles.) The rose-bay.

Olea′ster. (Dim. of *olea*, the olive-tree.) The wild olive.

OLE′CRANON. (From ωλενη, the ulna, and κρανον, the head.) The elbow, or process of the ulna, upon which a person leans.

O′lene. (Ωλενη.) The cubit, or ulna.

Oleosa′ccharum. (From *Oleum*, oil, and *saccharum*, sugar.) An essential oil, ground up with sugar.

O′LEUM. See *Oil.*

O′leum abietinum. The resinous juice which exudes spontaneously from the silver and red firs. It is supposed to be superior to that obtained by wounding the tree.

O′leum æthe′reum. Æthereal oil. *Oleum vini.* After the distillation of sulphuric æther, carry on the distillation with a less degree of heat, until a black froth begins to rise; then immediately remove the retort from the fire. Add sufficient water to the liquor in the retort, that the oily part may float upon the surface. Separate this, and add to it as much limewater as may be necessary to neutralise the adherent acid, and shake them together. Lastly, collect the ætherial oil which separates. This oil is used as an ingredient in the compound spirit of æther. It is of a yellow colour, less volatile than æther, soluble in alcohol, and insoluble in water.

O′leum amygdala′rum. See *Amygdalus.*

O′leum anima′le. An empyreumatic oil obtained by distillation from animal substances. It is sometimes exhibited as an antispasmodic and diaphoretic, in the dose of from ten to forty drops.

O′leum ani′si. Formerly *Oleum essentiale anisi, oleum e seminibus anisi.* Oil of anise. The essential oil of aniseed possesses all the virtues attributed to the anisum, and is often given as a stimulant and carminative, in the dose of from five to eight drops mixed with an appropriate vehicle. See *Pimpinella anisum.*

O′leum anthe′midis. Oil of chamomile, formerly called oleum e floribus chamæmeli. See *Anthemis nobilis.*

O′leum camphora′tum. See *Linimentum camphoræ.*

O′leum carpa′thicum. A fine essential oil, distilled from the fresh cones of the tree which affords the common turpentine. See *Pinus sylvestris.*

O′leum ca′rui. Formerly called *Oleum essentiale carui. Oleum essentiale e seminibus carui.* The oil of carraways is an admirable carminative, diluted with rectified spirit into an essence, and then mixed with any proper fluid. See *Carum.*

O′leum caryophy′lli aroma′tici. A stimulant and aromatic preparation of the clove. See *Eugenia caryophyllata.*

O′leum ce′drinum. *Essentia de cedro.* The oil of the peel of citrons, obtained in a particular manner, without distillation, in Italy.

O′leum cinnamo′mi. A warm, stimulant, and delicious stomachic. Given in the dose of from one to three drops, rubbed down with some yolk of egg, in a little wine, it allays violent emotions of the stomach from morbid irritability, and is particularly serviceable in debility of the primæ viæ, after cholera.

O′leum co′rnu ce′rvi. This is applied externally as a stimulant to paralytic affections of the limbs.

O'LEUM GABIA'NUM. See *Petroleum rubrum.*

O'LEUM JUNI'PERI. Formerly called *Oleum essentiale juniperi baccæ. Oleum essentiale e baccis juniperi.* Oil of juniper. Oil of juniper-berries possesses stimulant, carminative, and stomachic virtues, in the dose of from two to four drops, and in a larger dose proves highly diuretic. It is often administered in the cure of dropsical complaints, when the indication is to provoke the urinary discharge.

O'LEUM LAVE'NDULÆ. Formerly called *Oleum essentiale lavendulæ. Oleum essentiale e floribus lavendulæ.* Oil of lavender. Though mostly used as a perfume, this essential oil may be exhibited internally, in the dose of from one to five drops, as a stimulant in nervous head-aches, hysteria, and debility of the stomach.

O'LEUM LAU'RI. *Oleum laurinum.* An anodyne and antispasmodic application, generally rubbed on sprains and bruises unattended with inflammation.

O'LEUM LIMO'NIS. The essential oil of lemons possesses stimulant and stomachic powers, but is principally used externally, mixed with ointments, as a perfume.

O'LEUM LI'NI. Linseed oil is emollient and demulcent, in the dose of from half an ounce to an ounce. It is frequently given in the form of clyster in colics and obstipation. Cold-drawn linseed-oil, with lime-water and extract of lead, forms, in many instances, the best application for burns and scalds. See *Linum.*

O'LEUM LU'CII PI'SCIS. See *Esox lucius.*

O'LEUM MA'CIS. *Oleum myristicæ expressum.* Oil of mace. A fragrant sebaceous substance, expressed in the East Indies from the nutmeg. There are two kinds. The best is brought in stone jars, is somewhat soft, of a yellow colour, and resembles in smell the nutmeg. The other is brought from Holland, in flat square cakes. The weak smell and faint colour warrants our supposing it to be the former kind sophisticated. Their use is chiefly external, in form of plaster, unguent, or liniment.

O'LEUM MALABA'THRI. An oil similar in flavour to that of cloves, brought from the East Indies, where it is said to be drawn from the leaves of the cassia tree.

O'LEUM ME'NTHÆ PIPERI'TÆ. Formerly called *Oleum essentiale menthæ piperitidis.* Oil of peppermint. Oil of peppermint possesses all the active principle of the plant. It is mostly used to make the simple water; mixed with rectified spirit it forms an essence, which is put into a variety of compounds, as sugar drops and troches, which are exhibited as stimulants, carminatives, and stomachics.

O'LEUM ME'NTHÆ VI'RIDIS. Formerly called *Oleum essentiale menthæ sativæ.* Oil of spearmint. This essential oil is mostly in use for making the simple water, but may be exhibited in the dose of from two to five drops as a carminative, stomachic, and stimulant.

O'LEUM NE'ROLI. *Essentia neroli.* The essential oil of the flowers of the Seville orange-tree. It is brought to us from Italy and France.

O'LEUM MYRI'STICÆ. The essential oil of nutmeg is an excellent stimulant and aromatic, and may be exhibited in every case where such remedies are indicated, with advantage.

O'LEUM MYRI'STICÆ EXPRE'SSUM. This is commonly called oil of mace. See *Oleum macis.*

O'LEUM OLI'VÆ. See *Olea.*

O'LEUM ORI'GANI. Formerly called *Oleum essentiale origani.* Oil of origanum. A very acrid and stimulating essential oil. It is employed for alleviating the pain arising from caries of the teeth, and for making the simple water of marjoram.

O'LEUM PA'LMÆ. See *Cocos butyracea.*

O'LEUM PE'TRÆ. See *Petroleum.*

O'LEUM PIME'NTÆ. Oil of allspice. A stimulant and aromatic oil.

O'LEUM PULE'GII. Formerly called *Oleum essentiale pulegii.* Oil of penny-royal. A stimulant and antispasmodic oil, which may be exhibited in hysterical and nervous affections.

O'LEUM RI'CINI. See *Ricinus.*

O'LEUM ROSMARI'NI. Formerly called *Oleum essentiale roris marini.* Oil of rosemary. The essential oil of rosemary is an excellent stimulant, and may be given with great advantage in nervous and spasmodic affections of the stomach.

O'LEUM SABI'NÆ. A stimulating emmenagogue: it is best administered with myrrh, in the form of bolus.

O'LEUM SA'SSAFRAS. An agreeable stimulating stomachic carminative and sudorific.

O'LEUM SINA'PEOS. This is an emollient oil, the acrid principle of the mustard remaining in the seed. See *Sinapis.*

O'LEUM SU'CCINI. *Oleum succini rectificatum.* "Put amber in an alembic, and with the heat of a sand-bath, gradually increased, distil over an acid liquor, an oil, and a salt contaminated with oil. Then redistil the oil a second and a third time." Oil of amber is mostly used externally, as a stimulating application to paralytic limbs, or those affected with cramp and rheumatism. Hooping-cough, and other convulsive diseases, are said to be relieved also by rubbing the spine with this oil.

O'LEUM SULPHURA'TUM. Formerly called *Balsamum sulphuris simplex.* Sulphurated oil. "Take of washed sulphur, two ounces; olive oil, a pint. Having heated the oil in a very large iron pot, add the sulphur gradually, and stir the mixture after each addition, until they have united." This, which was formerly called simple balsam of sulphur, is an acrid stimulating preparation, and much praised by some in the cure of coughs and other phthisical complaints.

O′LEUM SY′RIÆ. A fragrant essential oil, obtained by distillation from the balm of Gilead plant. See *Dracocephalum moldavica.*

O′LEUM TEMPLI′NUM. *Oleum templinum verum.* A terebinthinate oil obtained from the fresh cones of the *Pinus abies*, of Linnæus.

O′LEUM TE′RRÆ. See *Petroleum.*

O′LEUM TEREBI′NTHINÆ RECTIFICA′TUM. "Take of oil of turpentine, a pint; water, four pints. Distil over the oil." Stimulant, diuretic, and sudorific virtues are attributed to this preparation, in the dose of from ten drops to twenty, which are given in rheumatic pains of the chronic kind, especially sciatica. Its chief use internally, however, is as an anthelmintic and styptic. Uterine, pulmonic, gastric, intestinal, and other hæmorrhages, when passive, are more effectually relieved by its exhibition than by any other medicine. Externally it is applied, mixed with ointments, and other applications, to bruises, sprains, rheumatic pains, indolent ulcers, burns, and scalds.

O′LEUM VI′NI. Stimulant and anodyne in the dose of from one to four drops.

O′LEUM VITRI′OLI. See *Sulphuric acid.*

OLFACTORY NERVES. (*Nervi olfactorii*; from *olfactus*, the sense of smelling.) The first pair of nerves are so termed, because they are the organs of smelling. They arise from the corpora striata, perforate the ethmoid bone, and are distributed very numerously on the pituitary membrane of the nose.

OLI′BANUM. (From *lebona*, Chald.) See *Juniperus lycia.*

OLIGOTRO′PHIA. (From ολιγος, small, and τρεφω, to nourish.) Deficient nourishment.

OLISTHE′MA. (From ολισθαινω, to fall out.) A luxation.

OLI′VA. See *Olea.*

Olives. } See *Olea.*
Olive-tree. }

Olive, spurge. See *Daphne mezereum.*

OLIVA′RIUS. (From *oliva*, the olive.) *Oliviformis.* Resembling the olive; applied to two eminences on the lower part of the medulla oblongata, called *corpora olivaria.*

OLOPHLY′CTIS. (From ολος, whole, and φλυκτις, a pustule.) A small hot eruption, covering the whole body; when partial, it is called phylctæna.

OLUSA′TRUM. (*Id est olus atrum*, the black herb, from its black leaves.) Lovage.

OMA′GRA. (From ωμος, the shoulder, and αγρα, a seizure.) The gout in the shoulder.

OMENTI′TIS. (*Omentitis*; from *omentum*, the caul.) Inflammation of the omentum, a species of peritonitis.

OME′NTUM. (From *omen*, a guess; so called because the soothsayers prophesied from an inspection of this part.) *Epiploon.* The caul. An adipose membranous viscus of the abdomen, that is attached to the stomach, and lies on the anterior surface of the intestines. It is thin and easily torn, being formed of a duplicature of the peritoneum, with more or less of fat interposed. It is distinguished into the great omentum and the little omentum.

The *omentum majus*, which is also termed *omentum gastrocolicum*, arises from the whole of the great curvature of the stomach, and even as far as the spleen, from whence it descends loosely behind the abdominal parietes, and over the intestines to the navel, and sometimes into the pelvis. Having descended thus far, its inferior margin turns inwards and ascends again, and is fastened to the colon and the spleen, where its vessels enter.

The *omentum minus*, or *omentum hepatico-gastricum*, arises posteriorly from the transverse fissure of the liver. It is composed of a duplicature of peritoneum, passes over the duodenum, and small lobe of the liver; it also passes by the lobulus spigelii and pancreas, proceeds into the colon and small curvature of the stomach, and is implanted ligamentous into the œsophagus. It is in this omentum that Winslow discovered a natural opening, which goes by his name. If air be blown in at the foramen of Winslow, which is always found behind the lobulus spigelii, between the right side of the liver and hepatic vessels, the vena portarum and duodenum, the cavity of the omentum, and all its sacs may be distended.

The omentum is always double, and between its lamellæ closely connected by very tender cellular substance, the vessels are distributed and the fat collected. Where the top of the right kidney, and the lobulus spigelii of the liver, with the subjacent large vessels, form an angle with the duodenum, there the external membrane of the colon, which comes from the peritoneum joining with the membrane of the duodenum, which also arises immediately from the peritoneum lying upon the kidney, enters the back into the transverse fissure of the liver, for a considerable space, is continuous with its external coat, contains the gall-bladder, supports the hepatic vessels, and is very yellow and slippery. Behind this membranous production, betwixt the right lobe of the liver, hepatic vessels, vena portarum, biliary ducts, aorta, and adjacent duodenum, there is the natural opening just mentioned, by which air may be blown extensively into all the cavity of the omentum. From thence, in a course continuous with this membrane from the pylorus and the smaller curvature of the stomach, the external membrane of the liver joins in such a manner, with that of the stomach, that the thin membrane of the liver is continued out of the fossa of the venal duct, across the little lobe into the stomach stretched before the lobe and before the pancreas. This little omentum, or *omentum hepatico-gastricum*, when inflated, resembles a cone, and gradually becoming harder and emaciated, it changes into a true ligament, by which the œsophagus is connected to the diaphragm. But the larger omentum, the *omentum gastrocolicum*, is of a much greater extent. It begins at the first accession of the right gastro-epiploic artery to the stomach, being continued there from the upper plate of the transverse mesocolon; and then from the whole great curve of the stomach, as far as the spleen, and also from the right convex end of the stomach towards the spleen, until it also terminates in a ligament, that ties the upper and back part of the spleen to the stomach; this is the anterior lamina. Being continued downward, sometimes to the navel, sometimes to the pelvis, it hangs before the intestines, and behind the muscles of the abdomen, until its lower edge being reflected upon itself, ascends, leaving an intermediate vacuity between it and the anterior lamina, and is continued to a very great extent, into the external membrane of the transverse colon, and lastly, into the sinus of the spleen, by which the large blood-vessels are received, and it ends finally on the œsophagus, under the diaphragm. Behind the stomach, and before the pancreas, its cavity is continuous with that of the smaller omentum. To this the *omentum colicum* is connected, which arises farther to the right than the first origin of the omentum gastrocolicum from the mesocolon, with the cavity of which it is continuous, but produced solely from the colon and its external membrane, which departs double from the intestine; it is prolonged, and terminates by a conical extremity, sometimes of longer, sometimes of shorter extent, above the intestinum cæcum. For all the blood which returns from the omentum and mesocolon, goes into the vena portarum, and by that into the liver itself. The omentum gastrocolicum is furnished with blood from each of the gastro-epiploic arteries, by many descending articulated branches, of which the most lateral are the longest, and the lowest anastomose by minute twigs with those of the colon. It also has branches from the splenic, duodenal, and adipose arteries. The omentum colicum has its arteries from the colon, as also the smaller appendices, and also from the duodenal and right epiploic. The arteries of the small omentum come from the hepatics, and from the right and left coronaries. The omentum being fat and indolent, has very small nerves. They arise from the nerves of the eighth pair, both in the greater and lesser curvatures of the stomach. The arteries of the mesentery are in general the same with those which go to the intestine, and of which the smaller branches remain in the glands and fat of the mesentery. Various small accessory arteries go to both mesocolons, from the intercostals, spermatics, lumbars, and capsular, to the transverse portion from the splenic artery, and pancreato-duodenalis, and to the left mesocolon, from the branches of the aorta going to the lumbar glands. The veins of the omentum in general accompany the arteries, and unite into similar trunks; those of the left part of the gastrocolic omentum into the splenic, and also those of the hepaticogastric, which likewise sends its blood to the trunk of the vena portarum: those from the larger and right part of the gastrocolic omentum, from the omentum colicum, and from the appendices epiploicæ into the mesenteric trunk. All the veins of the mesentery meet together and end in the vena portarum, being collected first into two large branches, of which the one, the mesenteric, receives the gastro-epiploic vein, the colicæ mediæ, the iliocolica, and all those of the small intestines, as far as the duodenum; the other, which going transversely, inserts itself into the former; above the origin of the duodenum, carries back the blood of the left gastric veins, and those of the rectum, except the lowermost, which belongs partly to those of the bladder and partly to the hypogastric branches of the pelvis. The vein which is called hæmorrhoidalis interna is sometimes inserted rather into the splenic than into the mesenteric vein. Has the omentum also lymphatic vessels? Certainly there are conglobate glands, both in the little omentum and in the gastro-colicum; and antient anatomists have observed pellucid vessels in the omentum; and a modern has described them for lacteals of the stomach.

OME'NTUM CO'LICUM. See *Omentum*.

OME'NTUM GASTRO-CO'LICUM. See *Omentum*.

OME'NTUM HEPATICO-GAS'TRICUM. See *Omentum*.

OMO. Names compounded with this word belong to muscles which are attached to the scapula; from ωμος, the shoulder.

OMOCO'TYLE. (From ωμος, the shoulder, and κοτυλη, a cavity.) The cavity in the extremity of the neck of the scapula, in which the head of the humerus is articulated.

OMO-HYOIDE'US. *Coraco hyoideus*, of Albinus and Douglas, *Scapulo hyodien*, of Dumas. A muscle situated between the os hyoides and shoulder, that pulls the os hyoides obliquely downwards. It arises broad, thin, and fleshy, from the superior costa of the scapula, near the semilunar notch, and from the ligament that runs across it; thence ascending obliquely, it becomes tendinous below the sternocleidomastoideus, and growing fleshy again, is inserted into the base of the os hyoides.

OMOPLA′TA. (From *ωμος*, the shoulder, and *ϖλατυς*, broad.) See *Scapula.*

Omoplato-hyoide′us. The same as *Omohyoideus.*

Omo′tocos. (From *ωμος*, crude, and *τικτω*, to bring forth.) A miscarriage.

Omo′tribes. (From *ωμος*, crude, and *τριβω*, to bruise.) Oil expressed from unripe olives.

Ompha′cinum. (From *ομφακιον*, the juice of unripe grapes.) Oil expressed from unripe olives.

Ompha′cion. *Omphacium.* (From *ομφακος*, an unripe grape.) The juice of unripe grapes; and by some applied to that of wild apples, or crabs, commonly called *Verjuice.*

Omphaci′tis. (From *ομφακος*, an unripe grape, because it resembles an unripe grape.) A small kind of gall; an excrescence from the oak.

Omphaco′meli. (From *ομφακος*, an unripe grape, and *μελι*, honey.) A sort of oxymel made of the juice of unripe grapes and honey.

Omphaloca′rpus. (From *ομφαλος*, the navel, and *καρπος*, fruit; so called because its fruit resembles a navel.) Cleavers; hayriff.

OMPHALOCE′LE. (From *ομφαλος*, the navel, and *κηλη*, a tumour.) An umbilical hernia. See *Hernia.*

Omphalo′des. (From *ομφαλος*, a navel, and *ειδος*, resemblance: so named because the calyx is excavated in the middle like the human navel.) A plant resembling borage.

Omphaloma′ntia. (From *ομφαλος*, the navel, and *μαντευω*, to prophesy.) The foolish vaticination of midwives, who pretend to foretell the number of the future offspring from the number of knots in the navel.

OMPHALOS. (From *ομφιελισκω*, to roll up.) The navel.

OMPHALOTO′MIA. (From *ομφαλος*, the navel, and *τεμνω*, to cut.) The separation of the navel-string.

Ona′gra. (From *οναγρος*, the wild ass) An American plant; so called because it is said to tame wild beasts. Also a name for the rheumatism in the elbow.

ONEIRODY′NIA. (From *ονειρον*, a dream, and *οδυνη*, anxiety.) Disturbed imagination during sleep. A genus of disease in the class, *Neuroses*, and order, *Vesaniæ*, of Cullen, containing two species,

1. *Oneirodynia activa*, walking in the sleep.

2. *Oneirodynia gravans*, the incubus, or night-mare. See *Night-mare.*

Oneiro′gmos. (From *ονειρωττω*, to dream.) Venereal dreams.

Oneiro′gonos. (From *ονειρος*, a dream, and *γονη*, the seed.) So the Greeks call an occasional emission of the semen in sleep, when it only happens rarely.

Onion. See *Allium cepa.*

Onion, sea. See *Scilla.*

O′nis. (From *ονος*, an ass.) The dung of an ass. It was in repute with Hippocrates.

Oni′scus. (From *ονος*, an ass; so called because like the ass it requires much beating before it is useful.) The stock-fish. Also the slow-worm.

Oni′scus ase′llus. The systematic name of the woodlouse. *Millepedes. Millepedæ.* These insects, though they obtain a place in the pharmacopœias, are very seldom used medicinally in this country; they appear to act as stimulants and slight diuretics, and for this purpose they ought to be administered in a much greater dose than is usually prescribed. The expressed juice of forty or fifty living millepedes, given in a mild drink, has been said to cure very obstinate jaundices.

Oni′tis. (From *ονος*, an ass, because asses covet it.) The origanum plant.

Onobry′chis. (From *ονος*, an ass, and *βρυχω*, to bray; so called, according to Blanchard, because the smell or taste makes asses bray.) Holy hay; saintfoin; cockshead vetch.

ONO′NIS. (From *ονος*, an ass, because it interrupts asses when at plough.) 1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

2. The pharmacopœial name of the rest harrow.

Ono′nis arve′nsis. See *Ononis spinosa.*

Ono′nis spino′sa. The systematic name of the rest harrow. *Resta bovis. Arresta bovis. Remora aratri.* The roots of this plant have a faint unpleasant smell, and a sweetish, bitterish, somewhat nauseous taste. Their active matter is confined to the cortical part, which has been sometimes given in powder, or other forms, as an aperient and diuretic.

ONOPO′RDIUM. (*Ονοπορδον*; from *ονος*, an ass, and *περδω*, to break wind; so named from its being much coveted by asses, and from the noise it makes upon pressure.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia æqualis.*

Onopo′rdium aca′nthium. The systematic name of the cotton-thistle. *Carduus tomentosus.* The plant distinguished by this name in the pharmacopœias, is the *Onopordium acanthium; calycibus squamosis; squamis patentibus; foliis ovato-oblongis, sinuatis*, of Linnæus. Its expressed juice has been recommended as a cure for cancer, either applied by moistening lint with it, or mixing some simple farinaceous substance, so as to form a poultice, which should be in contact with the disease, and renewed twice a day.

Ono′sma echioi′des. The systematic name of the plant whose root is called *anchusa lutea* in some pharmacopœias. It is supposed to possess emmenagogue virtues.

Ony′chia. (From ονυξ, the nail.) A whitlow at the side of the finger nail.

O′NYX. Ονυξ. *Unguis.* An abscess, or collection of pus between the lamellæ of the cornea; so called from its resemblance to the stone called onyx. The diagnostic signs are, a white spot or speck, prominent, soft, and fluctuating. The species are:

1. *Onyx superficialis,* arising from inflammation, not dangerous, for it vanishes when the inflammation is resolved by the use of astringent collyria.

2. *Onyx profundus,* or a deep abscess, which is deeper seated between the lamellæ of the cornea, sometimes breaking internally, and forming an hypopium: when it opens externally it leaves a fistula upon the cornea; whenever the pus is exsiccated, there remains a leucoma.

Ooei′des. (From ωον, an egg, and ειδος, a likeness.) An epithet for the aqueous humour of the eye.

Ophioglossoi′des. (From οφιογλοσσον, ophioglossum, and ειδος, a likeness.) A fungus resembling the adder's tongue.

OPHIOGLO′SSUM. (From οφις, a serpent, and γλωσσα, a tongue; so called from the resemblance of its fruit.) The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Filices.* Adder's tongue.

OPHIORRHI′ZA. (From οφις, a serpent, and ριζα, a root, because the plant, says Hermann, is regarded in Ceylon, as a grand specific for the bite of the naja or ribband snake.) The name of a genus of plants. Class, *Pentandria.* Order, *Monogynia.*

Ophiorrhi′za mu′ngos. The systematic name of the plant whose root is called radix serpentum in the pharmacopœias. *Mungos radix.* This bitter root of the plant *Ophiorrhiza mungos,* of Linnæus, is much esteemed in Java, Sumatra, &c. as preventing the effects which usually follow the bite of the *naja,* a venomous serpent, with which view it is eaten by them. It is also said to be exhibited medicinally in the cure of intestinal worms.

Ophiosco′rodon. (From οφις, a serpent, and σκοροδον, garlic, so named because it is spotted like a serpent.) Broad-leaved garlic.

Ophiosta′phylum. (From οφις, a serpent, and ςαφυλη, a berry, so called because serpents feed upon its berries.) White bryony. See *Bryonia.*

OPHIO′XYLUM. (From οφις, and ξυλον, because its root spreads in a zigzag manner like the twisting of a serpent.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Serpentine-wood plant.

Ophio′xylum serpenti′num. The systematic name of the tree whose wood is termed lignum serpentum. The nature of this root does not appear to be yet ascertained. It is the produce of the *Ophioxylum serpentinum,* of Linnæus: by whom it is said to be very bitter. In the cure of the bite of venomous serpents and malignant diseases it is said to be efficacious.

O′phrys. (Οφρυς.) The lowest part of the forehead, where the eye-brows grow. Also an herb so called because its juice was used to make the hair of the eye-brows black.

OPHTHA′LMIA. (From οφθαλμος, the eye.) *Ophthalmitis.* An inflammation of the membranes of the eye, or of the whole bulb of the eye. The symptoms which characterize this disease are a preternatural redness of the tunica conjunctiva, owing to a turgescence of its blood-vessels; pain and heat over the whole surface of the eye, often attended with a sensation of some extraneous body between the eye and eyelid and a plentiful effusion of tears. All these symptoms are commonly increased by motion of the eye, or its coverings, and likewise by exposure to light. We judge of the depth of the inflammation by the degree of pain produced by light thrown upon the eye. When the pain produced by light is considerable, we have much reason to imagine that the parts at the bottom of the eye, and especially the retina, are chiefly affected, and, *vice versa,* when the pain is not much increased by this exposure, we conclude with great probability that the inflammation is confined perhaps entirely to the external covering of the eye. In superficial affections of this kind too the symptoms are in general local; but, whenever the inflammation is deep-seated, it is attended with severe shooting pains through the head, and fever to a greater or less degree commonly takes place. During the whole course of the disease there is for the most part a very plentiful flow of tears, which frequently become so hot and acrid as to excoriate the neighbouring parts, but it often happens after the disease has been of some duration, that together with the tears a considerable quantity of a yellow purulent-like matter is discharged, and when the inflammation has either spread to the eyelids, or has been seated there from the beginning, as soon as the tarsi become affected a discharge takes place of a viscid glutinous kind of matter, which greatly adds to the patient's distress, as it tends to increase the inflammation by cementing the eye-lids so firmly together as to render it extremely difficult to separate them.

Ophthalmia is divided into external, when the inflammation is superficial, and internal, when the inflammation is deep-seated, and the globe of the eye is much affected.

In severe ophthalmia two distinct stages are commonly observable; the first is attended with a great deal of heat and pain in the eye, and considerable febrile disorder; the second is comparatively a chronic affection without pain and fever. The eye is merely weakened, moister than in the healthy state, and more or less red.

Ophthalmia may be induced by a variety of exciting causes such as operate in producing inflammation in other situations. A severe cold in which the eyes are affected at the same time with the pituitary cavities, fauces, and trachea; change of weather; sudden transition from heat to cold; the prevalence of cold winds; residence in damp or sandy countries, in the hot season; exposure of the eyes to the vivid rays of the sun; are causes usually enumerated; and considering these it does not seem extraordinary that ophthalmia should often make its appearance as an epidemic, and afflict persons of every age and sex. Besides these exciting causes, writers also generally mention the suppression of some habitual discharge, as of the menses, bleedings from the nose, from hæmorrhoids, &c. Besides which, inflammation of the eyes may be occasioned by the venereal and scrophulous virus.

OPHTHA'LMIC GANGLION. *Ganglion ophthalmicum.* Lenticular ganglion. This ganglion is formed in the orbit, by the union of a branch of the third or fourth pair with the first branch of the fifth pair of nerves.

OPHTHALMIC NERVE. *Nervus ophthalmicus.* Orbital nerve. The first branch of the ganglion or expansion of the fifth pair of nerves. It is from this nerve that a branch is given off, to form, with a branch of the sixth, the great intercostal nerve.

Ophtha'lmici exte'rni. See *Motores oculorum.*

OPHTHALMODY'NIA. (From *οφθαλμος*, an eye, and *οδυνη*, pain.) A vehement pain in the eye, without, or with very little redness. The sensation of pain is various, as itching, burning, or as if gravel were between the globe of the eye and lids. The species are:

1. *Ophthalmodynia rheumatica*, which is a pain in the muscular expansions of the globe of the eye, without redness in the albuginea. The rheumatic inflammation is serous, and rarely produces redness.

2. *Ophthalmodynia periodica*, is a periodical pain in the eye, without redness.

3. *Ophthalmodynia spasmodica*, is a pressing pain in the bulb of the eye, arising from spasmodic contractions of the muscles of the eye, in nervous, hysteric, and hypochondriac persons. It is observed to terminate by a flow of tears.

4. *Ophthalmodynia from an internal inflammation* of the eye. In this disorder, there is a pain and sensation as if the globe was pressed out of the orbit.

5. *Ophthalmodynia hydropthalmica.* After a great pain in the inferior part of the os frontis, the sight is obscured, the pupil is dilated, and the bulb of the eye appears larger, pressing on the lid. This species is likewise perceived from an incipient hydropthalmia of the vitreous humour.

6. *Ophthalmodynia arenosa*, is an itching and sensation of pain in the eye, as if sand or gravel were lodged between the globe and lid.

7. *Ophthalmodynia symptomatica*, which is a symptom of some other eye-disease, and is to be cured by removing the exciting cause.

8. *Ophthalmodynia cancrosa*, which arises from cancerous acrimony deposited in the eye, and is rarely curable.

Ophthalmopo'nia. (From *οφθαλμος*, the eye, and *πονεω*, to labour.) An intense pain in the eye, whence the light is intolerable.

OPHTHALMOPTO'SIS. (From *οφθαλμος*, an eye, and *πτωσις*, a fall.) A falling down of the globe of the eye on the cheek, canthus, or upwards, the globe itself being scarce altered in magnitude. The cause is a relaxation of the muscles, and ligamentous expansions of the globe of the eye. The species are:

1. *Ophthalmoptosis violenta*, which is generated by a violent contusion or strong stroke, as happens sometimes in boxing. The eye falls out of the socket on the cheek or canthus of the eye, and from the elongation and extension of the optic nerve occasions immediate blindness.

2. *Ophthalmoptosis*, from a tumour within the orbit. An exostosis, toph, abscess, encysted tumours, as, atheroma, hygroma; or scirrhus, forming within the orbit, or induration of the orbital adeps, may throw the bulb of the eye out of the socket upwards, downwards, or towards either canthus.

3. *Ophthalmoptosis paralytica*, or the paralytic ophthalmoptosis, which arises from a palsy of the recti muscles, whence a stronger power in the oblique muscles of the bulb.

4. *Ophthalmoptosis staphylomatica*, when the staphyloma depresses the inferior eyelid and extends on the cheek.

OPIATE. (*Medicamentum opiatum*; from the effects being like that of opium.) A medicine that procures sleep, &c. See *Anodynes.*

O'pion. (Οπιον.) Opium.

Opi'smus. (From *οπιον*, opium.) An opiate confection.

Opi'sthenar. (From *οπισθεν*, backwards, and θεναρ, the palm.) The back part of the palm.

Opisthocra′nium. (From οπισθεν, backward, and κρανιον, the head.) The occiput, or hinder part of the head.

Opisthocypho′sis. (From οπισθεν, backward, and κυφωσις, a gibbosity.) A curved spine.

OPISTHO′TONOS. (From οπισθεν, backwards, and τεινω, to draw.) A fixed spasm of several muscles, so as to keep the body in a fixed position, and bent backwards. Cullen considers it as a variety of tetanus. See *Tetanus.*

O′PIUM. (Probably from οπος, juice; or from *opi*, Arab.) The inspissated juice of the white poppy. See *Papaver Somniferum.*

Opoba′lsamum. (From οπος, juice, and ϐαλσαμον, balsam.) See *Amyris gileadensis.*

Opoca′lpason. (From οπος, juice, and καλπασον, a tree of that name.) *Opocarpason.* The juice of a tree called *Carpasus.* It resembles myrrh, but is poisonous.

Opodeoce′le. A rupture through the foramen ischii, or into the labia pudendi.

OPODELDOC. A term of no meaning, frequently mentioned by Paracelsus. Formerly it signified a plaster for all external injuries, but now is confined to a camphorated soap liniment.

OPO′PANAX. (From οπος, juice, and πανаξ, the panacea.) See *Pastinaca opopanax.*

Opo′pia. (From οπτομαι, to see.) The bones of the eyes.

Opo′rice. (From οπωρα, autumnal fruits.) A conserve made of ripe fruits.

Oppila′tio. (From *oppilo*, to shut up.) *Oppilation* is a close kind of obstruction; for, according to Rhodius, it signifies, not only to shut out, but also to fill.

Oppilati′va. (From *oppilo*, to shut up.) Medicines or substance which shut up the pores.

Oppo′nens po′llicis. See *Flexor ossis metacarpi pollicis.*

Oppre′ssio. The catalepsy or any pressure upon the brain.

Opsi′gonos. (From οψι, late, and γινομαι, to be born.) A dens sapientiæ, or late cut tooth.

OPTIC NERVES. (*Nervi optici*, from οπτομαι, to see; because they are the organs of sight.) The second pair of nerves of the brain, they arise from the thalami nervorum opticorum, perforate the bulb of the eye, and in it form the retina.

Opu′ntia. (*Ab Opunte*, from the city *Opus*, near which it flourished.) See *Cactus.*

Orache, stinking. See *Chenopodium vulvaria.*

Orange. See *Citrus aurantium.*

Orange, Seville. See *Citrus aurantium.*

Orange, shaddock. See *Shaddock.*

ORBICULA′RE OS. *Orbicularis*, shaped like a ring, from *orbiculus*, a little ring. *Os pisiforme.* The name of a bone of the carpus. Also a very small round bone, not larger than a pinhead, that belongs to the internal ear.

ORBICULA′RIS O′RIS. (*Musculus orbicularis oris*, from *orbiculus*, a little ring; so called from its shape.) *Sphincter labiorum*, of Douglas, *semi orbicularis*, of Winslow, *constrictor oris*, of Cowper, and *labial*, of Dumas. A muscle of the mouth, formed in a great measure by those of the lips: the fibres of the superior descending, those of the inferior ascending and decussating each other about the corner of the mouth, they run along the lip to join those of the opposite side, so that the fleshy fibres appear to surround the mouth like a sphincter. Its use is to shut the mouth, by contracting and drawing both lips together, and to counteract all the muscles that assist in opening it.

ORBICULA′RIS PALPEBRA′RUM. *Orbicularis, scil. musculus. Orbicularis palpebrarum ciliaris*, of authors, and *maxillo palpebral*, of Dumas. A muscle common to both the eyelids. It arises by a number of fleshy fibres from the outer edge of the orbitar process of the superior maxillary bone, and from a tendon near the inner angle of the eye; these fibres run a little downwards and outwards, over the upper part of the cheek, below the orbit, covering the under eyelid, and surround the external angle, being closely connected only to the skin and fat; they then run over the superciliary ridge of the os frontis, towards the inner canthus, where they mix with the fibres of the occipito-frontalis and corrugator supercilii: then covering the upper eyelid, they descend to the inner angle opposite to their inferior origin, and firmly adhere to the internal angular process of the os frontis, and to the short round tendon which serves to fix the palpebræ and muscular fibres arising from it. It is inserted into the nasal process of the superior maxillary bone, by a short round tendon, covering the anterior and upper part of the lachrymal sac, which tendon can be easily felt at the inner canthus of the eye. The use of this muscle is to shut the eye, by drawing both lids together, the fibres contracting from the outer angle towards the inner, press the eyeball, squeeze the lachrymal gland, and convey the tears towards the puncta lachrymalia.

Orbicula′ris palpebra′rum cilia′ris. See *Orbicularis palpebrarum.*

ORBIT. *Orbita.* The two cavities under the forehead, in which the eyes are situated, are termed orbits. The angles of the orbits are called *canthi.* Each orbit is composed of seven bones, viz. the frontal, maxillary, jugal, lachrymal, ethmoid, palatine, and sphenoid. The use of this bony socket is to maintain and defend the organ of sight, and its adjacent parts.

O′RCHEA. (From ορχις, a testicle.) Galen says it is the *scrotum*.

O′RCHIS. (From ορεγομαι, to desire.)

1. A testicle.

2. The name of a genus of plants in the Linnæan system. Class, *Gynandria*. Order, *Diandria*.

O′RCHIS BIFO′LIA. The systematic name of the butterfly orchis. See *Orchis mascula*.

O′RCHIS MA′SCULA. The systematic name of the male orchis. *Satyrion*. Dog's-stones. Male orchis. *Orchis bulbis indivisis, nectarii labio quadrilobo crenulato, cornu obtuso petalis dorsalibus reflexis*, of Linnæus. The root has a place in the Materia Medica of the Edinburgh pharmacopœia, on account of the glutinous slimy juice which it contains. The root of the *orchis bifolia* is also collected. Satyrion root has a sweetish taste, a faint and somewhat unpleasant smell. Its mucilaginous or gelatinous quality has recommended it as a demulcent. Salep, which is imported here from the East, is a preparation of an analogous root, which considered as an article of diet, is accounted extremely nutritious, as containing a great quantity of farinaceous matter in a small bulk. The supposed aphrodisiac qualities of this root, which have been noticed ever since the days of Dioscorides, seem, says Dr. Woodville, to be founded on the fanciful doctrine of signatures, thus orchis, i. e. ορχις, testiculus, habet radices, instar testiculorum.

O′RCHIS MO′RIO. The systematic name of the orchis from whose root the salep is made. Salep is a farinaceous powder imported from Turkey. It may be obtained from several other species of the same genus of plants. It is an insipid substance, of which a small quantity, by proper management, converts a large portion of water into a jelly, the nutritive powers of which have been greatly over-rated. Salep forms a considerable part of the diet of the inhabitants of Turkey, Persia, and Syria. The method of preparing salep is as follows: the new root is to be washed in water, and the fine brown skin which covers it is to be separated by means of a small brush, or by dipping the root in warm water, and rubbing it with a coarse linen cloth. The roots thus cleaned, are to be spread on a tin plate, and placed in an oven, heated to the usual degree, where they are to remain six or ten minutes. In this time they will have lost their milky whiteness, and acquired a transparency like horn, without any diminution of bulk. Being arrived at this state, they are to be removed in order to dry and harden in the air, which will require several days to effect; or they may be dried in a few hours, by using a very gentle heat. Salep, thus prepared, contains a great quantity of vegetable aliment; as a wholesome nourishment it is much superior to rice; and has the singular property of concealing the taste of salt water. Hence, to prevent the dreadful calamity of famine at sea, it has been proposed that the powder of it should constitute part of the provisions of every ship's company. With regard to its medicinal properties, it may be observed, that its restorative, mucilaginous, and demulcent qualities, render it of considerable use in various diseases, when employed as aliment, particularly in sea-scurvy, diarrhœa, dysentery, symptomatic fever, arising from the absorption of pus, and the stone or gravel.

ORCHI′TIS. (From ορχις, a testicle.) See *Hernia humoralis*.

O′RCHOS. (From ορχος, a plantation or orchard; so called from the regularity with which the hairs are inserted.) The extremities of the eye-lids, where the eye-lashes grow.

ORCHO′TOMY. (From ορχις, a testicle, and τεμνω, to cut.) Castration. The operation of extracting a testicle.

OREOSELI′NUM. (From ορος, a mountain, and σελινον, parsley, so named because it grows wild upon mountains.) Black mountain parsley. See *Athamanta*.

ORE′STION. (From ορος, a mountain.) In Dioscorides it is the *Helenium*, or a kind of elecampane growing upon mountains.

ORE′XIS. (From ορεγομαι, to desire.) *Orexia*. The appetite.

ORIBASIUS, an eminent physician of the 4th century, was born at Pergamus, or according to others, at Sardes, where he resided for some time. He is mentioned as one of the most learned and accomplished men of his age, and the most skilful in his profession: and he not only obtained great public reputation, but also the friendship of the Emperor Julian, who appointed him quæstor of Constantinople. But after the death of that prince he suffered a severe reverse; he was stripped of his property, and sent into banishment among the Barbarians. He sustained his misfortunes however with great fortitude; and the dignity of his character, with his professional skill and kindness, gained him the veneration of these rude people, among whom he was adored as a tutelary god. At length he was recalled to the Imperial court, and regained the public favour. He was chiefly a compiler; but some valuable practical remarks first occur in his writings. He made at the request of Julian, extensive "Collections" from Galen, and other preceding authors, in about seventy books, of which only seventeen now remain; and afterwards made a "Synopsis of this vast work for the use of his son in nine books: there are also extant four books, on medicines and diseases, entitled "Euporistorum Libri." He praises highly local evacuations of blood especially by scarifications, which had been little noticed before: and he affirms, that he was himself cured of the plague by it, having lost in this way two pounds of blood from the thighs on the second day of the disease. He first described a singular species of insanity, under the name of *lycanthropia*, in which the patient wanders about by night among the tombs, as if changed into a wolf: though such a disease is noticed in the New Testament.

Ori′cia. (From Oricus, a city of Epirus, near which it grows.) A species of fir or turpentine tree.

Orienta′lia fo′lia. The leaves of senna.

ORI′GANUM. (From *ορος*, a mountain, and *γανοω*, to rejoice; so called because it grows upon the side of mountains.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*.

2. The pharmacopœial name of the wild marjoram.

Ori′ganum cre′ticum. See *Origanum dictamnus*.

Ori′ganum dicta′mnus. The systematic name of the dittany of Crete. *Dictamnus creticus*. *Origanum creticum*. *Onitis*. The leaves of this plant, *Origanum dictamnus: foliis inferioribus tomentosis, spicis nutantibus*, of Linnæus, are now rarely used; they have been recommended as emmenagogue and alexipharmic.

Ori′ganum majora′na. The systematic name of sweet marjoram. *Marjorana*. *Origanum, foliis ovatis obtusis, spicis subrotundis compactis pubescentibus*, of Linnæus. This plant has been long cultivated in our gardens, and is in frequent use for culinary purposes. The leaves and tops have a pleasant smell, and a moderately warm aromatic, bitterish taste. They yield their virtues to aqueous and spirituous liquors, by infusion, and to water in distillation, affording a considerable quantity of essential oil. The medicinal qualities of the plant are similar to those of the wild plant (see *Origanum vulgare*); but being much more fragrant it is thought to be more cephalic, and better adapted to those complaints known by the name of nervous; and may therefore be employed with the same intentions as lavender. It was directed in the *pulvis sternutatorius*, by both pharmacopœias, with a view to the agreeable odour which it communicates to the asarabacca, rather than to its errhine power, which is very inconsiderable; but it is now wholly omitted in the Pharm. Lond. In its recent state, it is said to have been successfully applied to scirrhous tumours of the breast.

Ori′ganum syri′acum. The Syrian herb mastich. See *Teucrium marum*.

Ori′ganum vulga′re. The systematic name of the wild marjoram. *Marjorana mancurana*. *Origanum heracleoticum*, from *Heraclea*, where the best was said to be produced. *Zazarhendi herba*. Wild marjoram. *Origanum vulgare; spicis subrotundis paniculatis conglomeratis, bracteis calyce longioribus ovatis*, of Linnæus. This plant grows wild in many parts of Britain. It has an agreeable aromatic smell, approaching to that of marjoram, and a pungent taste, much resembling thyme, to which it is likewise thought to be more allied in its medicinal qualities, and therefore deemed to be emmenagogue, tonic, stomachic, &c. The dried leaves used instead of tea, are said to be exceedingly grateful. They are employed in medicated baths and fomentations.

O′ris constri′ctor. See *Orbicularis oris*.

Orlea′na te′rra. (*Orleana*, so named from the place where it grows.) See *Bixa orleana*.

Ornitho′galum mari′timum. (From *ορνις*, a bird, and *γαλα*, milk, so called from the colour of its flowers, which are like the milk found in eggs.) A kind of wild onion. See *Scilla*.

Ornithoglo′ssum. (From *ορνις*, a bird, and *γλωσσα*, a tongue, so called from its shape.) Bird's tongue. The seeds of the ash-tree, as sometimes so called.

ORNITHOLOGY. (From *ορνις*, a bird, and *λογος*, a discourse.) That part of natural history which treats of birds.

Ornithopo′dium. (From *ορνις*, a bird, and *πους*, a foot; so called from the likeness of its pods to a bird's claw.) Bird's foot; scorpion wort.

O′rnus. (From *orn*, Heb.) The ash-tree which affords manna.

Oroba′nche. (From *οροβος*, the wild pea, and *αγχω*, to suffocate; so called because it twines round the orobus and destroys it.) The great tooth-wort or hypocystis.

Orobry′chis. (From *οροβος*, the wood-pea, and *βρυχω*, to eat.) The same as orobus.

O′ROBUS. (From *ερεπτω*, to eat.)

1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Decandria*.

2. The pharmacopœial name of the ervum. See *Ervum*.

O′robus tubero′sus. The heath-pea. The root of this plant is said to be nutritious. The Scotch islanders hold them in great esteem, and chew them like tobacco.

Oroseli′num. See *Athamanta*.

Orpiment. *Orpimentum*. Native orpiment is found in yellow, brilliant, and as it were, talky masses, often mixed with realgar, and sometimes of a greenish colour. See *Arsenic*.

Orpine. See *Sedum telephium*.

Orrhopy′gium. (From *ορος*, the extremity, and *πυγη*, the buttocks.) The extremity of the spine, which is terminated by the os coccygis.

O′rrhos. (From *ρεω*, to flow.) Serum, whey. The raphe; and the extremity of the sacrum.

Orris, common. See *Iris germanica.*

Orris, Florentine. See *Iris florentina.*

Orthoco′lon. (From *ορθος*, straight, and *κωλον*, a limb.) It is a species of stiff joint, when it cannot be bended, but remains straight.

ORTHOPNŒ′A. (From *ορθος*, erect, and *πνοη*, breathing.) A very quick and laborious breathing, during which the person is obliged to be in an erect posture.

Orva′le. (*Orvale*, French.) A species of clary or horminum.

Orvieta′num is used for a medicine that resists poisons, from a mountebank of Orvieta in Italy, who first made himself famous by taking such things upon the stage, after doses of pretended poisons. Though some say, its inventor was one H. F. Orvietanus, and that it is named after him.

ORY′ZA. (From *orez*, Arab.)

1. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Digynia.* The rice plant.

2. The name for rice, or the seeds of the *Oryza sativa*, of Linnæus.

Ory′za sativa. The systematic name of the plant which affords the rice which is the principal food of the inhabitants in all parts of the East, where it is boiled and eaten, either alone or with their meat. Large quantities of it are annually sent into Europe, and it meets with a general esteem for family purposes. The people of Java have a method of making puddings of rice, which seems to be unknown here, but it is not difficult to put in practice if it should merit attention. They take a conical earthen pot, which is open at the large end, and perforated all over: this they fill about half full with rice, and putting it into a larger earthen pot of the same shape, filled with boiling water, the rice in the first pot soon swells, and stops the perforations, so as to keep out the water; by this method the rice is brought to a firm consistence, and forms a pudding, which is generally eaten with butter, oil, sugar, vinegar, and spices. The Indians eat stewed rice with good success against the bloody flux; and in most inflammatory disorders they cure themselves with only a decoction of it. The spirituous liquor called arrack is made from this grain. Rice grows naturally in moist places; and will not come to perfection, when cultivated, unless the ground be sometimes overflowed, or plentifully watered. The grain is of a grey colour when first reaped; but the growers have a method of whitening it before it is sent to market. The manner of performing this, and beating it out in Egypt, is thus described by Hasselquist: They have hollow iron cylindrical pestles, about an inch diameter, lifted by a wheel worked with oxen. A person sits between the pestles, and, as they rise, pushes forward the rice, whilst another winnows and supplies fresh parcels. Thus they continue working until it is entirely free from chaff. Having in this manner cleaned it, they add one-thirtieth part of salt, and rub them both together, by which the grain acquires a whiteness; then it is passed through a sieve, to separate the salt again from it. In the island of Ceylon they have a much more expeditious method of getting out the rice; for, in the field where it is reaped, they dig a round hole, with a level bottom, about a foot deep, and eight yards diameter, and fill it with bundles of corn. Having laid it properly, the women drive about half a dozen oxen continually round the pit; and thus they will tread out forty or fifty bushels a-day. This is a very antient method of treading out corn, and is still practised in Africa upon other sorts of grain.

OS. 1. (Os, ossis, neut.) a bone.

2. (Os, oris, neut.) the mouth.

Os exte′rnum. The entrance into the vagina. It is so named in opposition to the mouth of the womb, which is called the os internum, or os tincæ.

Os inte′rnum. *Os tincæ*, and *amphideon*, or *amphideum.* Galen calls it *oscheon.* The orifice or mouth of the womb.

Os leo′nis. The antirrhinum linaria.

Os ti′ncæ. See *Os internum.*

Oscheoce′le. (From *οσχεον*, the scrotum, and *κηλη*, a tumour.) This term is sometimes given to a tumour of the scrotum, from an accumulation of water, (see *Hydrocele*); and sometimes to a scrotal hernia, (see *Hernia.*)

O′scheon. *Οσχεον.* The scrotum. Galen gives the name to the *os uteri.*

Oscheo′phyma. (From *οσχεον*, the scrotum, and *φυμα*, a tumour.) A swelling of the scrotum.

Oscillation of Boerhaave. See *Irritability.*

O′scitans. (From *oscito*, to gape.) The yawning fever.

OSCITA′TIO. (From *oscito*, to gape.) *Chasme. Oscedo.* Yawning. Gaping.

Osculato′rius. (From *osculo*, to kiss; so called because the action of kissing is performed by it.) The sphincter muscle of the lips.

O′SCULUM. (Dim. of *os*, mouth.) A little mouth.

Osmund-royal. See *Osmunda regalis.*

OSMU′NDA. (From *Osmund*, who first used it.) The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Filices.*

Osmu'nda rega'lis. *Filix florida.* The systematic name of the osmund-royal. Its root possesses astringent and emmenagogue virtues.

O'sphys. Οσφυς. The loins.

O'SSA SPONGIO'SA. The spongy bones are two in number, and are called *ossa spongiosa inferiora.* The ethmoid bone has two turbinated portions, which are sometimes called the superior spongy bones. These bones, which from their shape, are sometimes called *ossa turbinata*, have, by some anatomists, been described as belonging to the ethmoid bone; and by others, as portions of the ossa palati. In young subjects, however, they are evidently distinct bones. They consist of a spongy lamella in each nostril. The convex surface of this lamina is turned towards the septum narium, and its concave part towards the maxillary bone, covering the opening of the lacrymal duct into the nose. From their upper edge arise two processes: the posterior of these, which is the broadest, hangs as it were upon the edge of the antrum highmorianum; the anterior one joins the os unguis, and forms a part of the lachrymal duct. These bones are complete in the fœtus. They are lined with the pituitary membrane; and, besides their connection with the ethmoid bone, are joined to the ossa maxillaria superiora, ossa palati, and ossa unguis. Besides these ossa spongiosa inferiora, there are sometimes two others, situated lower down, one in each nostril. These are very properly considered as a production of the sides of the maxillary sinus turned downwards. In many subjects, likewise, we find other smaller bones, standing out into the nostrils, which, from their shape, might also deserve the name of *turbinata*, but they are uncertain in their size, situation, and number.

OSSI'CULA AUDI'TUS. The small bones of the internal ear are four in number, viz. the malleus, incus, stapes, and os orbiculare; and are situated in the cavity of the tympanum. See *Malleus, Incus, Stapes*, and *Orbiculare os*.

OSSIFICATION. (From *os*, a bone, and *facio*, to make.) See *Bone.*

Ossi'fraga. (From *os*, a bone, and *frango*, to break.) A petrified root, called the bone-binder, from its supposed virtues in uniting fractured bones.

Ossi'fragus. See *Osteocolla.*

Ossi'vorus. (From *os*, a bone, and *voro*, to devour.) Applied to a species of tumour or ulcer, which destroys the bone.

Osta'gra. (From οστεον, a bone, and αγρα, a laying hold of.) A forceps to take out bones with.

Ostei'tes. (From οςεον, a bone.) The bone-binder. See *Osteocolla.*

OSTEOCO'LLA. (From οςεον, a bone, and κολλαω, to glue.) *Ossifraga. Holosteus. Osteites. Amosteus. Osteolithos. Stelochites.* Glue-bone, stone, or bone-binder. A particular carbonate of lime found in some parts of Germany, particularly in the Marché of Brandenburg, aud in other countries. It is met with in loose sandy grounds, spreading from near the surface to a considerable depth, into a number of ramifications, like the roots of a tree; it is of a whitish colour, soft whilst under the earth, friable when dry, rough on the surface, for the most part either hollow within, or filled with a solid wood, or with a powdery white matter. It was formerly celebrated for promoting the coalition of fractured bones, and the formation of callus; which virtues are not attributed to it in the present day.

OSTEO'COPUS. (From οςεον, a bone, and κοπος, uneasiness.) A very violent fixed pain in any part of the bone.

Osteoge'nica. (From οςεον, a bone, and γενναω, to beget.) Medicines which promote the generation of a callus.

OSTEOGENY. (*Osteogenia*, from οςεον, a bone, and γενεια, generation.) The growth of bones. Bones are either formed between membranes or in the substance of cartilages, and the bony deposition is effected by a determined action of arteries. The secretion of bone takes place in cartilage in the long bones, as those of the arm, leg, &c.; and betwixt two layers of membrane, as in the bones of the skull, where true cartilage is never seen. Often the bony matter is formed in distinct bags, and there it grows into form, as in the teeth; for each tooth is formed in its little bag, which by injection can be filled and covered with vessels. Any artery of the body can assume this action, and deposit bone, which is formed also where it should not be, in the tendons, and in the joints, in the great arteries, and in the valves, in the flesh of the heart itself, or even in the soft and pulpy substance of the brain.

Most of the bones in the fœtus are merely cartilage before the time of birth; this cartilage is never hardened into bone, but from the first it is an organized mass. It has its vessels which are at first transparent, but which soon dilate; and whenever the red colour of the blood begins to appear in them, ossification very quickly succeeds, the arteries being so far enlarged as to carry the coarser parts of the blood. The first mark of ossification is an artery which is seen running into the centre of the jelly which is formed. Other arteries soon appear, and a net-work of vessels is formed, and then a centre of ossification begins, stretching its rays according to the length of the bone, and then the cartilage begins to grow opaque, yellow, brittle; it will no longer bend, and a bony centre may easily be discovered. Other points of ossification are successively formed, preceded by the appearance of arteries. The ossification follows the vessels, and buries and hides those vessels by which it is formed. The vessels advance towards the ends of the bone, the whole body of the bone becomes opaque, and there is left a small vascular circle only at either end: the heads are separated from the body of the bone by a thin cartilage, and the vessels of the centre, extending still towards the extremities of the bone, perforate the cartilage, pass into the head of the bone, and then its ossification also begins, and a small nucleus of ossification is formed in its centre. Thus the heads and the body are at first distinct bones, formed apart, joined by a cartilage, and not united till the age of fifteen or twenty years. Then the deposition of bone begins, and while the bone is laid by the arteries, the cartilage is conveyed away by the absorbing vessels; and while they convey away the superfluous cartilage, they model the bone into its due form, shape out its cavities, cancelli and holes, remove the thinner parts of the remaining cartilage, and harden it into due consistence. The earth which constitutes the hardness of bone, and all its useful properties, is inorganized, and lies in the interstices of bone, where it is made up of gelatinous matter to give it consistence and strength, furnished with absorbents to keep it in health, and carry off its wasted parts; and pervaded by blood vessels to supply it with new matter. During all the process of ossification the absorbents proportion their action to the stimulus which is applied to them; they carry away the serous fluid, when jelly is to take its place; they remove the jelly as the bone is laid; they continue removing the bony particles also, which (as in a circle,) the arteries continually renew; this renovation and change of parts goes on even in the hardest bones, so that after a bone is perfectly formed, its older particles are continually being removed, and new ones are deposited in their place. The bony particles are so deposited in the flat bones of the skull as to present a radiated structure, and the vacancies between the fibres which occasion this appearance, are found by injection to be chiefly passages for blood-vessels. As the fœtus increases in size the osseous fibres increase in number, till a lamina is produced; and as the bone continues to grow, more laminæ are added, till the more solid part of a bone is formed. The ossification which begins in cartilage is considerably later than that which has its origin between membranes. The generality of bones are incomplete until the age of puberty, or between the fifteenth and twentieth year, and in some few instances not until a later period: the small bones of the ear, however, are completely formed at birth.

OSTEOGRAPHY. (From οςεον, a bone, and γραφω, to describe.) The description of the bones. See *Bone*.

Osteoli'thos. (From οςεον, a bone, and λιθος, a stone.) See *Osteocolla*.

OSTEOLOGY. (From οςεον, a bone, and λογος, a discourse.) The doctrine of the bones. See *Bone*.

Ostia'rius. (From *ostium*, a door.) The pylorus.

Osti'ola. (Dim. of *ostium*, a door.) The valves or gates of the heart.

O'strea. *Ostreum*. (From οςρακον, a shell.) The oyster. The shell of this fish is occasionally used medicinally; its virtues are similar to those of the carbonate of lime. See *Creta*.

Ostri'tium. (Blanchard calls it a corruption from laserpitium.) Imperatoria, or master-wort.

Ostru'thium. *Laserpitium*. See *Imperatoria*.

Osy'ris. *Cassia poetica Lobelli*. *Cassia latinorum*. *Cassia lignea monspeliensium*. *Cassia monspeliensium*. Poet's rosemary. The whole shrub is astringent. It grows in the southern parts of Europe.

OTA'LGIA. (From ους, the ear, and αλγος, pain.) The ear-ache.

Otenchy'tes. (From ωτος, the genitive of ους, an ear, and εγχευω, to pour in.) A syringe for the ears.

Otho'nna. (From οθονη, lint; so called from the softness of its leaves.) A species of celandine.

O'tica. (From ους, the ear.) Medicines against diseases of the ear.

Oti'tes. (From ους, the ear.) An epithet of the little finger, because it is commonly made use of in scratching the ear.

OTI'TIS. (From ους, the ear.) Inflammation of the internal ear. It is known by pyrexia, and an excruciating and throbbing pain in the internal ear, that is sometimes attended with delirium.

Otopla'tos. (From ους, the ear.) A stinking ulcer behind the ears.

Otopyo'sis. (From ους, the ear, and πυον, pus.) A purulent discharge from the ear.

OTORRHÆ'A. (From ους, the ear, and ρεω, to flow.) A discharge of blood or matter from the ear.

OVA'LE FORA'MEN. See *Foramen ovale*.

OVA'RIUM. (Dim. of *ovum*, an egg.) The ovaria are two flat oval bodies, about one inch in length, and rather more than half in breadth and thickness, suspended in the broad ligaments, about the distance of one inch from the uterus behind, and a little below the Fallopian tubes. To the ovaria, according to the idea of their structure entertained by different anatomists, various uses have been assigned, or the purpose they answer has been differently explained. Some have supposed that their texture was glandular, and that they secreted a fluid equivalent to, and similar to the male semen; but others, who have examined them with more care, assert that they are ovaria in the literal acceptation of the term, and include a number of vesicles, or ova, to the amount of twenty-two of different sizes, joined to the internal surface of the ovaria by cellular threads or pedicles; and that they contain a fluid which has the appearance of thin lymph. These vesicles are, in fact, to be seen in the healthy ovaria of every young woman. They differ very much in their number in different ovaria, but are very seldom so numerous as has just been stated. All have agreed that the ovaria prepare whatever the female supplies towards the formation of the fœtus; and this is proved by the operation of spaying, which consists in the extirpation of the ovaria, after which the animal not only loses the power of conceiving, but desire is for ever extinguished. The outer coat of the ovaria, together with that of the uterus, is given by the peritoneum; and whenever an ovum is passed into the Fallopian tube, a fissure is observed at the part through which it is supposed to have been transferred. These fissures healing, leave small longitudinal cicatrices on the surface, which are said to enable us to determine, whenever the ovarium is examined, the number of times a woman has conceived. The corpora lutea are oblong glandular bodies of a yellowish colour, found in the ovaria of all animals when pregnant, and, according to some, when they are salacious. They are said to be calyces, from which the impregnated ovum has dropped; and their number is always in proportion to the number of conceptions found in the uterus. They are largest and most conspicuous in the early state of pregnancy, and remain for some time after delivery, when they gradually fade and wither till they disappear. The corpora lutea are very vascular, except at their centre, which is whitish; and in the middle of the white part is a small cavity, from which the impregnated ovum is thought to have immediately proceeded. The ovaria are the seat of a particular kind of dropsy, which most commonly happens to women at the time of the final cessation of the menses, though not unfrequently at a more early period of life. It is of the encysted kind, the fluid being sometimes limpid and thin, and at others discoloured and gelatinous. In some cases it has been found contained in one cyst, often in several; and in others the whole tumefaction has been composed of hydatids not larger than grapes. The ovaria are also subject, especially a short time after delivery, to inflammation, terminating in suppuration, and to scirrhous and cancerous diseases, with considerable enlargement. In the former state, they generally adhere to some adjoining part, as the uterus, rectum, bladder, or external integuments, and the matter is discharged from the vagina, by stool, by urine, or by an external abscess of the integuments of the abdomen.

OVIDUCT. (*Oviductus*, from *ovum*, an egg, and *ductus*, a canal.) The Fallopian tube, or canal, which runs from the ovary to the bottom of the womb.

OVIPAROUS. (From *ovum*, an egg, and *pario*, to bring forth.) Animals which exclude their young in the egg, which are afterwards hatched.

Ovo'rum te'stæ. Egg-shells. A testaceous absorbent.

O'VUM. See *Egg*.

O'vum philoso'phicum. *Ovum chymicum*. A glass body round like an egg.

O'vum ru'ffum. See *Abarnahas*.

OXALATE. *Oxalas*. A salt formed by the combination of the oxalic acid with different bases; thus, *oxalate of ammonia*, &c.

OXALIC ACID. *Acidum oxalicum*. Acid of sugar. This acid is obtained by evaporating the fresh juice of wood-sorrel almost to the consistence of honey, when it is to be poured into a glass vessel with a narrow neck, and covered with a stratum of the oil of olives. After some weeks the sides of the bottle are invested with a crust, which is the salt of sorrel, or *superoxalas potassæ*. The salt of sorrel is then to be dissolved in boiling water, and a small quantity of the nitrate of barytes added to it, when the barytes will unite with the oxalic acid, and the potash with the nitric acid. The oxalate of barytes, which is precipitated, is then to be decompounded by digestion with sulphuric acid, by which means the oxalic acid is let loose. Formerly this acid was considered as different from that of sugar, but it is now proved by experiment to be the same in all its properties.

O'XALIS. (From οξυς, sharp; so called from the sharpness of its juice.) The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Pentagynia*. Wood-sorrel.

O'xalis acetose'lla. (Dim. of *acetosa*.) The systematic name of the wood-sorrel. *Lujula*. *Alleluja*. *Oxalis; foliis ternatis, scapo unifloro, flore albo, capsulis pentagonis elasticis, radice squamoso-articulata*, of Linnæus. This plant grows wild in the woods, and flowers in April and May. The leaves are shaped like a heart, standing three together on one stalk. The acetosella is totally inodorous, but has a grateful acid taste, on which account it is used in sallads. Its taste is more agreeable than the common sorrel, and approaches nearly to that of the juice of lemons, or the acid of tartar, with which it corresponds in a great measure in its medical effects, being esteemed refrigerant, antiscorbutic and diuretic. It is recommended by Bergius, in inflammatory, bilious, and putrid fevers. The principal use, however, of the acetosella, is to allay inordinate heat, and to quench thirst; for this purpose, a pleasant whey may be formed by boiling the plant in milk, which under certain circumstances may be preferable to the conserve directed by the London College, though an extremely grateful and useful medicine. Many have employed the root of Lujula, probably on account of its beautiful red colour rather than for its superior efficacy. An essential salt is prepared from this plant, known by the name of essential salt of lemons, and commonly used for taking ink-stains out of linen. What is sold under the name of essential salt of lemons in this country, is said by some to consist of cream of tartar, with the addition of a small quantity of sulphuric acid. The leaves of wood-sorrel when employed externally in the form of poultices, are powerful suppurants, particularly in indolent scrofulous humours.

Oxa′lme. (From ὀξυς, sharp, and ἁλς, salt.) A mixture of vinegar and salt.

Ox-eye-daisy. See *Chrysanthemum leucanthemum.*

Ox's-tongue. See *Picris echiodes.*

Oxyca′ntha gale′ni. (From ὀξυς, sharp, and ακανθα, a thorn; so called from the acidity of its fruit.) The barberry. See *Berberis.*

Oxyce′drus. (From ὀξυ, acutely, and κεδρος, a cedar; so called from the sharp termination of its leaves.) A kind of cedar. Spanish juniper, a species of *juniperus.*

Oxyco′ccos. (From ὀξυς, acid, and κοκκος, a berry; so named from its acidity.) See *Vaccinium oxycoccos.*

Oxy′cratum. (From ὀξυς, acid, and κεραννυμι, to mix.) Oxycrates. Vinegar mixed with such a portion of water as is required, and rendered still milder by the addition of a little honey.

Oxycro′ceum empla′strum. (From ὀξυς, acid, and κροκος, *crocus,* saffron.) A plaster in which there is much saffron, but no vinegar necessary, unless in dissolving some gums.

OXYD. *Oxid. Oxide. Oxyde. Oxydum.* A substance formed by the union of oxygen with a basis: thus, *oxyd of iron, oxyd of copper,* &c.

Oxyd of carbon, gazeous. See *Carbon, gazeous oxide of.*

Oxydation. The operation by which a substance is made to combine with oxygen.

Oxyde′rcica. (From ὀξυς, acute, and δερκω, to see.) Medicines which sharpen the sight.

O′XYDUM. (So called from oxygen, which enters into its composition.) See *Oxyd.*

O′XYDUM ANTIMO′NII. See *Antimonii oxydum.*

O′xydum arse′nici a′lbum. See *Arsenic.*

O′xydum cu′pri vi′ride aceta′tum. See *Verdigris.*

O′xydum fe′rri lu′teum. See *Ferri subcarbonas.*

O′xydum fe′rri ni′grum. Black oxyde of iron. The scales which fall from iron, when heated, consist of iron combined with oxygen. These have been employed medicinally, producing the general effects of chalybeates, but not very powerfully. They are hardly now in use.

O′xydum fe′rri ru′brum. Red oxyde of iron. In this the metal is more highly oxydized, than in the black. It may be formed by long continued exposure to heat and air; or by treating iron with acids. Its properties in medicine are similar, but it is hardly employed at present, unless to give colour to a plaster, &c.

O′xydum hydra′rgyri cine′reum. See *Hydrargyri oxydum cinereum.*

O′xydum hydra′rgyri ni′grum. See *Hydrargyri oxydum cinereum.*

O′xydum hydra′rgyri ru′brum. See *Hydrargyri oxydum rubrum.*

O′xydum plu′mbi a′lbum. See *Plumbi subcarbonas.*

O′xydum plu′mbi ru′brum. See *Lead.*

O′xydum plu′mbi semivi′treum. See *Lithargyrus.*

O′xydum sti′bii a′lbum. See *Antimonii oxydum.*

O′xydum sti′bii semivi′treum. A vitreous oxyde of antimony. It was formerly called *Vitrum antimonii,* and consists of an oxyde of antimony with a little sulphur; it is employed to make antimonial wine.

O′xydum sti′bii sulphura′tum. This is an oxyde of antimony with sulphur, and was formerly called *Hepar antimonii. Crocus metallorum. Crocus antimonii.* It was formerly exhibited in the cure of fevers and atonic diseases of the lungs. Its principal use now is in preparing other medicines.

O′xydum zi′nci sublima′tum. See *Zinci oxydum.*

O′XYDUM ZI′NCI. See *Zinci oxydum.*

Oxy′garum. (From ὀξυς, acid, and γαρον, garum.) A composition of garum and vinegar.

OXYGEN. (*Oxygenium;* from ὀξυς, acid, and γενναω, to generate; because it is the generator of acidity.) This substance, although existing sometimes in a solid and sometimes in an aëriform state, is never distinctly perceptible to the human senses, but in combination.

We know it only in its combination, by its effects. Nature never presents it solitary; chemists do not know how to insulate it. It is a principle which was long unknown. It is absorbable by combustible bodies, and converts them into oxydes or acids. It is an indispensable condition of combustion, uniting itself always to bodies which burn, augmenting their weight, and changing their properties. It may be disengaged in the state of oxygen gas, from burnt bodies, by a joint accumulation of caloric and light. It is highly necessary for the respiration of animals. It exists universally dispersed through nature, and is a constituent part of atmospheric air, of water, of acids, and of all bodies of the animal and vegetable kingdoms.

One of the most remarkable combinations into which it is capable of entering, is that which it forms with light and caloric. The nature of that mysterious union has not been ascertained, but it is certain that, in that state, it constitutes the gazeous fluid called OXYGEN GAS.

Properties of Oxygen Gas. — Oxygen gas is an elastic invisible fluid, like common air, capable of indefinite expansion and compression. It has neither taste or odour, nor does it show any traces of an acid. Its specific gravity, as determined by Kirwan, is 0.00135, that of water being 1.0000; it is, therefore, 740 times lighter than the same bulk of water. Its weight is to atmospheric air as 1103 to 1000. One hundred and sixteen cubic inches of oxygen gas weigh 39.38 grains. It is not absorbed by water, but entirely absorbable by combustible bodies, which, at the same time, disengage its caloric and light, producing in consequence a strong heat and flame. It rekindles almost extinct combustible bodies. It is indispensable to respiration, and is the cause of animal heat. It hastens germination. It combines with every combustible body, with all the metals, and with the greater number of vegetable and animal substances. It is considered as the cause of acidity; and from this last property is derived the name *oxygen*, a word denoting the origin of acidity.

The act of its combining with bodies is called *oxydizement*, or *oxygenation*; and the bodies with which it is combined are called *oxydes*, or *acids*.

Oxygen gas is the chief basis of the pneumatic doctrine of chemistry.

Methods of obtaining Oxygen Gas. — We are at present acquainted with a great number of bodies from which we may, by art, produce oxygen gas. It is most amply obtained from the oxydes of manganese, lead, or mercury: from nitrate of potash; from the green leaves of vegetables, and from hyperoxymuriate of potash, or soda. Besides these, there are a great many other substances from which oxygen gas may be procured.

1. In order to procure oxygen gas in a state of great purity, pure hyperoxymuriate of potash, or soda, must be made use of. With this view, put some of the salt into a small earthen or glass retort, the neck of which is placed under the shelf of the pneumatic trough, filled with water; and heat the retort by means of a lamp. The salt will begin to melt, and oxygen gas will be obtained in abundance, and of great purity, which may be collected and preserved over water.

Explanation. — Hyperoxymuriate of potash consists of hyperoxymuriatic acid and potash; at an elevated temperature, a decomposition of the acid takes place; its oxygen unites to the caloric, and forms oxygen gas. The hyperoxymuriatic acid becomes therefore converted into simple muriatic acid, which remains in the retort united to the potash, in the form of muriate of potash.

2. Oxygen gas may likewise be obtained from the green leaves of vegetables.

For this purpose fill a bell-glass with water, introduce fresh-gathered green leaves under it, and place the bell, or receiver, inverted in a vessel containing the same fluid; expose the apparatus to the rays of the sun, and very pure oxygen gas will be liberated.

The emission of oxygen gas is proportioned to the vigour of the plant and the vivacity of the light; the quantity differs in different plants and under different conditions.

Explanation. — It is an established fact, that plants decompose carbonic acid, and probably water, which serve for their nourishment; they absorb the hydrogen and carbon of these fluids, disengaging a part of the oxygen in a state of purity. Light, however, favours this decomposition greatly; in proportion as the oxygen becomes disengaged, the hydrogen becomes fixed in the vegetable, and combines partly with the carbon and partly with the oxygen, to form the oil, &c. of the vegetable.

3. Nitrate of potash is another substance frequently made use of for obtaining oxygen gas, in the following manner:

Take any quantity of this salt, introduce it into a coated earthen or glass retort, and fit to it a tube, which must be plunged into the pneumatic trough, under the receiver filled with water. When the apparatus has been properly adjusted, heat the retort gradually, till it becomes red hot; the oxygen gas will then be disengaged rapidly.

Explanation. — Nitrate of potash consists of nitric acid and potash. Nitric acid consists again of oxygen and nitrogen. On exposing the salt to ignition, a partia decomposition of the acid takes place; the greatest part of the oxygen of the nitric acid unites to caloric, and appears under the form of oxygen gas. The other part remains attached to the potash in the state of nitrous acid. The residue in the retort is, therefore, nitrate of potash, if the process has been carried only to a certain extent.

Remark. — If too much heat be applied, particularly towards the end of the process, a total decomposition of the nitric acid takes place; the oxygen gas, in that case, will therefore be mingled with nitrogen gas. The weight of the two gases, when collected, will be found to correspond very exactly with the weight of the acid which had been decomposed. The residue then left in the retort is potash.

4. Black oxyde of manganese, however, is generally made use of for obtaining oxygen gas, on account of its cheapness. This native oxyde is reduced to a coarse powder; a stone, or rather an iron retort is then charged with it and heated. As soon as the retort becomes ignited, oxygen gas is obtained plentifully.

Explanation.—Black oxyde of manganese is the metal called manganese fully saturated with oxygen, together with many earthy impurities; on applying heat, part of the solid oxygen quits the metal and unites to caloric, in order to form oxygen gas, the remainder of the oxygen remains united to the metal with a forcible affinity; the metal, therefore, approaches to the metallic state, or is found in the state of a grey oxyde of manganese.

One pound of the best manganese yields upwards of 1400 cubic inches of oxgen gas, nearly pure. If sulphuric acid be previously added to the manganese, the gas is produced by a less heat, and in a larger quantity; a glass retort may then be used, and the heat of a lamp is sufficient.

5. Red oxyde of mercury yields oxygen gas in a manner similar to that of manganese.

Explanation. — This oxyde consists likewise of solid oxygen and mercury, the combination of which takes place on exposing mercury to a heat of about 610° Fahr. At this degree it attracts oxygen, and becomes converted into an oxyde; but if the temperature be increased, the attraction of oxygen is changed. The oxygen then attracts caloric stronger than it did the mercury; it therefore abandons it and forms oxygen gas. The mercury then re-appears in its metallic state.

6. Red oxyde of lead yields oxygen gas on the same principle.

Oxygenated muriatic acid. See *Oxymuriatic acid.*

Oxygly'cum. (From οξυς, acid, and γλυκυς, sweet). Honey mixed with vinegar. An oxymel.

Oxyla'pathum. (From οξυς, acid, and λαπαθον, the dock; so named from its acidity.) See *Rumex acutus.*

O'XYMEL. (From οξυς, acid, and μελι, honey.) Apomeli. Adipson. Honey and vinegar boiled to a syrup. *Mel acetatum.* Now called *Oxymel simplex.* "Take of clarified honey, two pounds; acetic acid, a pint. Boil them down to a proper consistence, in a glass vessel, over a slow fire." This preparation of honey and vinegar possesses aperient and expectorating virtues, and is given, with these intentions, in the cure of humoral asthma, and other diseases of the chest, in doses of one or two drachms. It is also employed in the form of gargle, when diluted with water.

O'xymel æru'ginis. See *Linimentum æruginis.*

O'xymel co'lchici. Oxymel of meadow saffron is an acrid medicine, but is nevertheless employed, for its diuretic virtues in dropsies.

O'xymel sci'llæ. "Take of clarified honey, three pounds; vinegar of squills, two pints. Boil them in a glass vessel, with a slow fire, to the proper thickness." Aperient, expectorant, and detergent virtues, are attributed to the honey of squills. It is given in doses of two or three drachms, along with some aromatic water, as that of cinnamon, to prevent the great nausea which it would otherwise be apt to excite. In large doses it proves emetic.

Oxymu'rias hydra'rgyri. See *Hydrargri oxymurias.*

OXYMURIA'TIC ACID GAS. *Oxygenated muriatic acid gas. Chlorine. Dephlogisticated marine acid.* This gas possesses an uncommonly pungent and suffocating odour. It is absolutely and in every respect non-respirable; animals immersed in it die instantly. It is absorbable by water, and forms with it what is called liquid oxymuriatic acid. When water is saturated with it, the compound crystallizes at low temperatures. Oxymuriatic acid gas is not invisible, but has a *yellow-greenish colour.* It is capable of maintaining and exciting combustion in many cases. Phosphorus, charcoal, red sulphuret of mercury, sulphuret of antimony, bismuth, iron, zinc, copper, gold, arsenic, cobalt, tin, lead, and several other combustible bodies take fire spontaneously when introduced into it. It is heavier than atmospheric air. It weakens and reddens the flame of a taper, but does not extinguish it. It decomposes ammonia. It thickens fat oils. It detonates with hydrogen gas. Nitrous gas immediately produces a cloud of reddish vapour with it. It is likewise decomposed by sulphuretted, phosphuretted, and carburetted hydrogen gases. It is not altered by exposure to light, and passes unaltered through an ignited porcelain tube. It bleaches stuffs, and totally destroys most of the vegetable colours, rendering them white. It also bleaches yellow wax, &c.

This gas may be obtained in several ways.

1. Take one part of the native oxyde of manganese, and as much red precipitate of mercury, or red lead, put them into a glass retort, and add four parts of concentrated muriatic acid. This, on distillation, affords a quantity of yellow aëriform fluid, which is oxymuriatic acid gas.

2. Put into a retort one part of powdered black oxyde of manganese, three or four of concentrated muriatic acid, connect the retort with the pneumatic trough and receive

the gas over water in the usual manner. When no more gas is liberated, apply the heat of a lamp, and gas will be produced abundantly, which may be kept in bottles with ground glass stoppers.

The oxyde of manganese yields up in this process part of its oxygen to part of the muriatic acid, which becomes converted into oxymuriatic acid gas; the oxyde of manganese being thus partly deoxydized is dissolved in the remaining quantity of the muriatic acid, which remains behind in the retort as muriate of manganese.

The retort containing the mixture should not be filled above one-third, for the mixture on the application of heat, swells, and is very apt to be forced over into the neck of the retort.

3. Oxymuriatic acid gas may likewise be obtained in an indirect manner, by decomposing muriate of soda in contact with black oxyde of manganese. For that purpose mix eight parts by weight, of muriate of soda with three of powdered oxyde of manganese, put the mixture into a tubulated retort, and pour upon it gradually four parts of sulphuric acid, diluted previously with three of water, and which has been suffered to cool after dilution. On applying a gentle heat, gas will be produced as before.

In this operation the sulphuric acid acts on the muriate of soda, to the base of which it unites; the muriatic acid liberated by this union, attacks the oxyde of manganese; one part of it combines with the oxygen, and another with the oxyde brought nearer to the metallic state; and the result is sulphate of soda and muriate of manganese, which remain in the distilling vessel; and oxymuriatic acid, which passes in the state of gas at common temperatures.

In preparing this gas great care should be taken that it does not escape into the apartment in any considerable quantity; as it acts violently on the pituitous membrane, occasions a defluxion of the brain, blunts the senses of smell and taste, produces headache and proves extremely injurious to health.

Pelletier fell a sacrifice in attempting to breathe it; a consumption was the consequence, which proved rapidly fatal.

Liquid ammonia is the remedy best calculated to check its effects when accidentally set at liberty in places where it is prepared.

The water which adheres to the inner side of the vessel filled with oxymuriatic acid gas, crystallizes in the form of yellow spangles, if the temperature is near the freezing point. If a considerable quantity of gas be thus condensed, care must be taken to keep it at a low temperature, for as soon as the temperature is raised, it expands, and endangers the bursting of the vessel. When absorbed by water it forms liquid,

OXYMURIATIC ACID.

This acid is of a greenish-yellow colour. It has a styptic bitter taste, and a very suffocating odour. Instead of reddening blue vegetable colours, it has the remarkable property of rendering them white. In high temperatures, when light is excluded, phosphorus remains unaltered in liquid oxymuriatic acid; but if light be admitted, the colour of the acid gradually disappears, and the phosphorus is converted into phosphoric acid. It thickens oils and animal fats, and renders them less disposed to combine with alkalis. Its action upon metals presents phenomena extremely curious and important; the oxygen of the acid unites with the metal, and the produced oxyde is afterwards dissolved by the de-oxydized acid.

Method of obtaining Oxymuriatic Acid. — Put into a tubulated retort, supported over a lamp, one part of black oxyde of manganese reduced to a gross powder, and pour over it three parts of concentrated muriatic acid: recline the retort in such a manner that the fluid which rises up into its neck, may easily run back again into the body, and apply a receiver with a little distilled water in it; the receiver must be luted to the retort by a fillet of paper. When the effervescence, which instantly takes place on the affusion of the acid ceases, apply a gentle heat. Oxymuriatic acid gas will be evolved, and the receiver become filled with yellow vapours, which are absorbed by the water. When the water has acquired a yellowish-green colour, the receiver may be removed, and another one applied till no more gas is extricated. The process may be more elegantly conducted by joining the apparatus of Burkitt or Pepys, to the distillatory vessel. The common muriatic acid which may arise is condensed in the first bottle, and the oxymuriatic acid gas unites to the water in the second, third, &c.

The phenomena attending the formation of this gas, and its action on other bodies, are here explained according to the theory of Berthollet. Scheele, who first discovered it, supposed it to be muriatic acid, deprived of phlogiston. Sir Humphrey Davy has maintained a similar opinion, and given it the name of chlorine from its colour. He supposes muriatic acid to be a compound of chlorine and hydrogen; and that in all cases, where chlorine appears to oxydize bodies, it is in consequence of water, or some other substance containing oxygen, being at the same time decomposed.

Oxymyrrhi'ne. (From οξυς, acute, and μυρρινη, the myrtle; so called from its ressemblance to myrtle, and its pointed leaves.) *Oxymyrsine.* Wild myrtle.

Oxymyrsi'ne. See *Oxymyrrhine.*

Oxyni'trum. (From οξυς, acid, and νιτρον, nitre.) A plaster composed chiefly of vinegar and nitre.

OXYO′PIA. (From οξυς, acute, and ωψ, the eye.) The faculty of seeing more acutely than usual. Thus there have been instances known of persons who could see the stars in the day-time. The proximate cause is a preternatural sensibility of the retina. It has been known to precede the gutta serena; and it has been asserted that prisoners who have been long detained in darkness, have learned to read and write in darkened places.

Oxyphlegma′sia. (From οξυς, acute, and φλεγω, to burn.) An acute inflammation.

Oxyphœ′nicon. (From οξυς, acid, and φοινιξ, the tamarind; a native of Phœnicia.) See *Tamarindus.*

Oxypho′nia. (From οξυς, sharp, and φωνη, the voice.) The same as *Paraphonia clangens.* It is a howling.

Oxyre′gma. (From οξυς, acid, and ερευγω, to break wind.) An acid eructation.

Oxyrrho′dinon. (From οξυς, acid, and ροδινον, oil of roses.) A composition of the oil of roses and vinegar.

Oxysaccha′rum. (From οξυς, acid, and σακχαρον, sugar.) A composition of vinegar and sugar.

O′xysal diaphore′ticum. A preparation of Angelo Sala. It is a fixed salt, loaded with more acid than is necessary to saturate it. The salt of juniper is of this kind.

Oxy′toca. (From οξυς, quick, and τικτω, to bring forth.) Medicines which promote delivery.

Oxytriphy′llum. (From οξυς, acid, and τριφυλλον, trefoil; so named from its acidity.) Wood-sorrel.

Oyster. See *Ostrea.*

Oyster-shell. See *Ostrea.*

OZÆ′NA. (From οζη, a stench.) An ulcer situated in the nose, discharging a fœtid purulent matter, and sometimes accompanied with caries of the bones. Some authors have signified by the term, an ill-conditioned ulcer in the antrum. The first meaning is the original one. The disease is described as coming on with a trifling tumefaction and redness about the ala nasi, accompanied with a discharge of mucus, with which the nostril becomes obstructed. The matter gradually assumes the appearance of pus, is most copious in the morning, and is sometimes attended with sneezing, and a little bleeding. The ulceration occasionally extends round the ala nasi to the cheek, but seldom far from the nose, the ala of which also it rarely destroys. The ozæna is often connected with scrophulous and venereal complaints. In the latter cases, portions of the ossa spongiosa often come away. After the complete cure of all venereal complaints, an exfoliating dead piece of bone will often keep up symptoms similar to those of the ozæna, until it is detached. Mr. Pearson remarks, that the ozæna frequently occurs as a symptom of the cachexia syphiloidea. It may perforate the septum nasi, destroy the ossa spongiosa, and even the ossa nasi. Such mischief is now more frequently the effect of the cachexia syphiloidea, than of lues venerea. The ozæna must not be confounded with abscesses in the upper jaw-bone.

O′zymum. (From οζω, to smell; so called from its fragrance.) Sweet Basil.

P.

P. A contraction of *pugillus,* a pugil, or eighth part of a handful, and sometimes a contraction of *partes,* parts.

P. Æ. A contraction of *partes æquales.*

P. P. A contraction of *pulvis patrum,* Jesuit's powder.

PAAW, Peter, was born at Amsterdam in 1564. After studying four years at Leyden, he went to Paris, and other celebrated schools for improvement; and took his degree at Rostock. Thence he repaired to Padua, and attended the dissections of Fabricius ab Aquapendente; and possessing a good memory, as well as great assiduity, he evinced such respectable acquirements, that he was appointed to a medical professorship on his return to Leyden in 1589. His whole ambition was centered in supporting the dignity and utility of this office; and he obtained general esteem. Anatomy and botany were his favourite pursuits; and Leyden owes to him the establishment of its botanic garden. He died in 1617. Besides some commentaries on parts of Hippocrates and other ancient authors, he left a treatise on the Plague, and several other works, chiefly anatomical.

PA′BULUM. (From *pasco,* to feed.) Food, aliment. The animal heat and animal spirits are called *pabulum vitæ,* the food of life.

PACCHIONI, Anthonio, was born at Reggio in 1664. After studying there for some time he went to complete himself at Rome under the celebrated Malpighi; who subsequently introduced him into practice at Tivoli, where he resided six years with considerable reputation. He then returned to Rome, and assisted Lancisi in his explanation of the plates of Eustachius. He devoted also great attention to dissection, particularly of the membranes of the brain. In his first work he assigned to the dura mater a contractile power, whereby it acted upon the brain; this notion obtained temporary celebrity, but it was confuted by Baglivi and other anatomists. He afterwards announced the discovery of glands near the longitudinal sinus, from which he alleged lymphatics pass to the pia mater; this involved him in farther controversies. He was a member of several learned academies, and died in 1726. Among his posthumous works is one on the mischief of epispastics in many diseases.

Pacchionian glands. See *Glandulæ Pacchioniæ.*

Pachy'ntica. (From ϖαχυνω, to incrassate.) Medicines which incrassate or thicken the fluids.

Pa'chys. Παχυς, thick. The name of a disorder described by Hippocrates, but not known by us.

Pa'dus. See *Prunus padus.*

Pædancho'ne. (From ϖαις, a child, and αγχω, to strangulate.) A species of quinsy common among children.

Pædarthro'cace. (From ϖαις, a boy, αρθρον, a joint, and κακον, an evil.) The joint evil. Severinus calls the *Spina Ventosa* by this name, as also doth Dr. Cullen. By some this name is used to express a sort of anasarca.

PÆO'NIA. (From *Pæon,* who first applied it to medicinal purposes.) Pæony.

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Digynia.*

2. The pharmacopœial name of the common peony.

Pæo'nia officina'lis. The systematic name of the common pæony. Male and female pæony. This plant, *Pæonia foliis oblongis,* of Linnæus, has long been considered as a powerful medicine; and, till the late revision by the London College, it had a place in the catalogue of the Materia Medica; in which the two common varieties of this plant are indiscriminately directed for use: and, on the authority of G. Bauhin, improperly distinguished into male and female pæony.

The roots and seeds of pæony have, when fresh, a faint, unpleasant smell, somewhat of the narcotic kind, and a mucilaginous subacrid taste, with a slight degree of bitterness and astringency. In drying, they lose their smell and part of their taste. Extracts made from them by water are almost insipid, as well as inodorous; but extracts made by rectified spirits are manifestly bitterish, and considerably adstringent. The flowers have rather more smell than any of the other parts of the plant, and a rough, sweetish taste, which they impart, together with their colour, both to water and spirit.

The roots, flowers, and seeds of pæony, have been esteemed in the character of an anodyne and corroborant, but more especially the roots; which, since the days of Galen, have been very commonly employed as a remedy for the epilepsy. For this purpose, it was usual to cut the root into thin slices, which were to be attached to a string, and suspended about the neck as an amulet; if this failed of success, the patient was to have recourse to the internal use of this root, which Willis directs to be given in the form of a powder, and in the quantity of a drachm, two or three times a-day, by which, as we are informed, both infants and adults were cured of this disease. Other authors recommended the expressed juice to be given in wine, and sweetened with sugar, as the most effectual way of administering this plant. Many writers, however, especially in modern times, from repeated trials of the pæony in epileptic cases, have found it of no use whatever; though professor Home, who gave the radix pæoniæ to two epileptics at the Edinburgh infirmary, declares that one received a temporary advantage from its use. Of the good effects of this plant, in other disorders, we find no instances recorded.

Paigil. See *Primula veris.*

PAIN. *Dolor.* Any unpleasant sensation, or irritation.

Painter's colic. See *Colica pictonum.*

Palate. See *Palatum.*

PALATE BONE. (*Os palati;* from *palo,* to hedge in; because it is staked in, as it were, by the teeth.) These two bones are of very irregular figure. They are placed between the ossa maxillaria superiora and the os sphenoides at the back part of the roof of the mouth, and extend from thence to the bottom of the orbit. Each of these bones may be divided into four parts, viz. the inferior, or square portion, the pterygoid process, the nasal lamella, and orbitar process. The first of these, or the square part of the bone, helps to form the palate of the mouth. The upper part of its internal edge rises into a spine, which makes part of the septum narium. The *pterygoid* process, which is smaller above than below, is so named from its being united with the pterygoid processes of the sphenoid bone, with which it helps to form the pterygoid fossæ. It is separated from the square part of the bone, and from the nasal lamella, by an oblique fossa, which, applied to such another in the os maxillare, forms a passage for a branch of the fifth pair of nerves. The *nasal* lamella is nothing more than a very thin bony plate, which arises from the upper side of the external edge of the square part of the bone. Its inner surface is concave, and furnished with a ridge, which supports the back part of the os spongiosum inferius. Externally, it is convex, and firmly united to the maxillary bone. The *orbitar* process is more irregular than any other part of the bone. It has a smooth surface, where it helps to form the orbit; and, when viewed in its place, we see it contiguous to that part of the orbit which is formed by the os maxillare, and appearing as a small triangle at the inner extremity of the orbitar process of this last-mentioned bone. This fourth part of the os palati likewise helps to form the zygomatic fossa on each side, and there its surface is concave. Between this orbitar process and the sphenoid bone, a hole is formed, through which an artery, vein, and nerve, are transmitted to the nostrils. The ossa palati are complete in the fœtus. They are joined to the ossa maxillaria superiora, os sphenoides, os ethmoides, ossa spongiosa inferiora, and vomer.

Pala′ti circumfle′xus. See *Circumflexus.*

Pala′ti leva′tor. See *Levator palati.*

Pala′ti te′nsor. See *Circumflexus.*

PALATO-PHARYNGE′US. (*Musculus palato-pharyngeus;* so called from its origin in the palate and insertion in the pharyx.) *Thyro-staphilinus,* of Douglas. *Thyro-pharyngo-staphilinus,* of Winslow, and *palato-pharyngien,* of Dumas. A muscle situated at the side of the entry of the fauces. It arises by a broad beginning from the middle of the velum pendulum palati at the root of the uvula posteriorly, and from the tendinous expansion of the circumflexus palati. The fibres are collected within the posterior arch behind the tonsils, and run backwards to the top and lateral part of the pharynx, where the fibres are scattered and mixed with those of the stylo-pharyngeus. It is inserted into the edge of the upper and back part of the thyroid cartilage. Its use is to draw the uvula and velum pendulum palati downwards and backwards, and at the same time to pull the thyroid cartilage and pharynx upwards, and shorten it; with the *constrictor superior pharyngis* and tongue, it assists in shutting the passage into the nostrils; and in swallowing, it thrusts the food from the fauces into the pharynx.

Palato-salpinge′us. (From *palatum,* the palate, and σαλπιγξ, a trumpet; so called from its origin in the palate, and its trumpet-like shape.) See *Circumflexus.*

Palato-staphili′nus. See *Azygos uvulæ.*

PALA′TUM. (From *palo,* to hedge in, because it is staked in, as it were, by the teeth.) The palate or roof of the mouth.

PALA′TUM MO′LLE. The soft palate. This lies behind the bony palate; and from the middle of it the uvula hangs down.

Palea de mecha. A name given by some to the *Juncus Odoratus.*

Palimpi′ssa. (From ϖαλιν, repetition, and ϖισσα, pitch.) Dioscorides says, that dry pitch is thus named, because it is prepared of pitch twice boiled.

Palindro′mia. (Παλιν, again, and δρομος, a course.) This term is used by Hippocrates for any regurgitation of humours to the more noble parts: and sometimes for the return of a distemper.

Paliu′rus. (From ϖαλλω, to move, and *ουρον*, urine; so called from its diuretic qualities.) A species of white thorn.

PALLAS, Peter Simon, was born at Berlin, where his father was professor of surgery in 1741. He applied early and assiduously to his studies, particularly to dissection, insomuch that he was enabled, at the age of 17, to read a public course on anatomy. He then went to Halle, and in 1759 to Gottingen, where a severe illness for some time interrupted his pursuits; but he afterwards made numerous experiments on poisons, and dissections of animals; and composed a very ingenious treatise on those which are found within others, particularly the worms occurring in the human body. In the following year he took his degree at Leyden, then travelled through Holland and England, directing his attention almost entirely to natural history. In 1762 his father recalled him to Berlin, but allowed him soon after to settle at the Hague, where he could better prosecute his favourite studies; the fruit of which shortly appeared in a valuable treatise on zoophytes, and some other publications; and he was admitted into the Royal Society of London, and the Academy Naturæ Curiosorum, to which he had sent interesting papers. About this period he meditated a voyage to the Cape of Good Hope, and other Dutch Settlements; but his father again recalled him in 1766; however, in the following year, he was induced by Catherine II. to become professor of natural history at St. Petersburg. Thence, in 1768, he set out, with some other philosophers, on a scientific tour, as far as Siberia, which occupied six years; of this he afterwards published a most interesting account in five quarto volumes, comprehending every thing memorable in the several provinces which he had visited. This was followed by a particular history of the Mongul tribes, who had, at different periods, over-run the greater part of Asia, and whom he clearly proved to be a distinct race from the Tartars. In 1777 he read before the academy a dissertation on the formation of mountains, and the changes which this globe has undergone, particularly in the Russian empire. He also published, from time to time, numerous works relative to zoology, botany, agriculture, and geography. About the year 1784, he received signal proofs of the empress's favour; who not only considerably increased his salary, and conferred upon him the order of St. Vlodimir; but learning that he wished to dispose of his collection of natural history, gave him a greater price than he had valued it at, and allowed him the use of it during his life. In 1794 he travelled to the Crimea, of which he published an account on his return; and his health now beginning to decline, the empress presented him an estate in that province, with a liberal sum for his establishment. Unfortunately, however, the situation was particularly unhealthy, and proved very injurious to his family. At length he determined to visit his brother, and his native city, where he died shortly after, in 1811.

PALLIATI'VA. (From *pallio*, to dissemble.) Medicines given only with an intent to relieve pains in a fatal disease.

Palm oil. See *Cocos butyracea.*

PA'LMA. (From ϖαλλω, to move.)

1. The palm of the hand.

2. The name of a genus of plants in the Linnæan system, so called because the leaves are extended from the top, like the fingers upon the hand.

Pa'lma christi. See *Ricinus.*

PALMA'RIS BRE'VIS. (*Palmaris*; from *palma*, the hand.) *Palmaris brevis vel caro quadrata*, of Douglas, and *Palmare cutané*, of Dumas. A small, thin, cutaneous, flexor muscle of the hand, situated between the wrist and the little finger. Fallopius tells us that it was discovered by Cananus. Winslow names it *palmaris cutaneus.* It arises from a small part of the internal annular ligament, and inner edge of the aponeurosis palmaris, and is inserted by small bundles of fleshy fibres into the os pisiforme, and into the skin and fat that cover the abductor minimi digiti. This muscle seems to assist in contracting the palm of the hand.

Palma'ris cuta'neus. See *Palmaris brevis.*

PALMA'RIS LO'NGUS. *Ulnaris gracilis*, of Winslow, and *Epitrochlo carpi palmaire*, of Dumas. A flexor muscle of the arm, situated on the fore-arm, immediately under the integuments. It arises tendinous from the inner condyle of the os humeri, but soon becomes fleshy, and after continuing so about three inches, terminates in a long slender tendon, which, near the wrist, separates into two portions, one of which is inserted into the internal annular ligament, and the other loses itself in a tendinous membrane, that is nearly of a triangular shape, and extends over the palm of the hand, from the carpal ligament to the roots of the fingers, and is called *aponeurosis palmaris.* Some of the fibres of this expansion adhere strongly to the metacarpal bones, and separate the muscles and tendons of each finger. Several anatomical writers have considered this aponeurosis as a production of the tendon of this muscle, but seemingly without reason, because we now and then find the latter wholly inserted into the carpal ligament, in which case it is perfectly distinct from the aponeurosis in question; and, in some subjects, the palmaris longus is wanting, but the aponeurosis is always to be found. Rhodius, indeed, says that the latter is now and then deficient; but there is good reason to think that he was mistaken. This muscle bends the hand, and may assist in its pronation; it likewise serves to stretch the aponeurosis palmaris.

Pa'lmos. (From ϖαλλω, to beat.) A palpitation of the heart.

Pa'lmula. (Dim. of *palma*, the hand; so called from its shape.)

1. A date.

2. The broad and flat end of a rib.

PA'LPEBRÆ. (*A palpitando*, from their frequent motion.) The eyelids, distinguished into upper and under; at each end they unite and form the canthi.

Palpebræ superioris levator. See *Levator palpebræ superioris.*

Palpebrarum aperiens rectus. See *Levator palpebræ superioris.*

PALPITA'TIO. 1. A palpitation or convulsive motion of a part.

2. Palpitation of the heart, which is either constant or frequently returning. A genus of disease in the class *Neuroses*, and order *Spasmi*, of Cullen.

Palsy. See *Paralysis.*

Paluda'pium. (From *palus*, a lake, and *apium*, smallage; so named because it grows in and about rivulets.) A species of smallage.

Pa'lus sa'nctus. A name of guaiacum.

Pamphi'lium. (From ϖας, all, and φιλος, grateful; so called from its extensive usefulness.) A plaster described by Galen.

Pampinifo'rmis. (From *pampinus*, a tendril, and *forma*, a likeness.) Resembling a tendril; applied to the spermatic chord and the thoracic duct.

PANACE'A. (From ϖαν, the neuter of ϖας, all, and ακεομαι, to cure.) An epithet given by the antients to those remedies which they conceived would cure every disease. Unfortunately for men of the present day there are no such remedies.

Panace'a du'cis holsa'tiæ. The sulphate of potash.

Panace'a duplica'ta. Sulphate of potash.

Panace'a vegeta'bilis. Saffron.

PANA′DA. (Dim. of *pane*, bread. Ital.) *Panata. Panatella.* Bread boiled in water to the consistence of pap. Dry biscuits soaked are the best for this purpose.

Panale′thes. (From παν, all, and αληθης, true.) A name of a cephalic plaster, from its universal efficacy.

Panari′tia. Corrupted from paronychia.

PA′NARIS. (Corrupted from *paronychia.*) See *Paronychia.*

PANA′VA. The lignum pavanæ. See *Croton tiglium.*

PA′NAX. (From παν, all, and ακος, a cure.) See *Laserpitium chironium.*

Pa′nax quinquefo′lium. The systematic name of the plant which affords the ginseng root. *Ginseng. Panax quinquefolium; foliis ternis quinatis*, of Linnæus. The root is imported into this country scarcely the thickness of the little finger, about three or four inches long, frequently forked, transversely wrinkled, of a horny texture, and both internally and externally of a yellowish-white colour. To the taste it discovers a mucilaginous sweetness, approaching to that of liquorice, accompanied with some degree of bitterness, and a slight aromatic warmth. The Chinese ascribe extraordinary virtues to the root of ginseng, and have no confidence in any medicine unless in combination with it. In Europe, however, it is very seldom employed.

Panchre′stos. (From παν, all, and χρηστος, useful, so named from its general usefulness.) *Panchreston.* An epithet of a collyrium described by Galen. It is also of the same signification as *Panacea*, but little used.

Panchymago′ga. (From παν, all, χυμος, *succus*, humour, and αγω, *duco*, to lead or draw.) This term is ascribed to such medicines as are supposed to purge all humours equally alike: but this is a conceit now not minded.

Pancœ′nus. (From πας, all, and κοινος, common.) Epidemic; applied to popular diseases, which attack all descriptions of persons.

Pancra′tium. (From πας, all; and κρατεω, to conquer; so called from its virtues in overcoming all obstructions.) See *Scilla.*

PA′NCREAS. (From πας, all, and κρεας, flesh; so called from its fleshy consistence.) A glandular viscus of the abdomen, of a long figure, compared to a dog's tongue, situated in the epigastric region under the stomach. It is composed of innumerable small glands, the excretory ducts of which unite and form one duct, called the pancreatic duct, which perforates the duodenum with the ductus communis choledochus, and conveys a fluid, in its nature similar to saliva, into the intestines. The pancreatic artery is a branch of the splenic. The veins evacuate themselves into the splenic vein. Its nerves are from the par vagum and great intercostal. The use of the pancreas is to secrete the pancreatic juice, which is to be mixed with the chyle in the duodenum. The quantity of the fluid secreted is uncertain; but it must be very considerable, if we compare it with the weight of the saliva, the pancreas being three times larger, and seated in a warmer place. It is expelled by the force of the circulating blood, and the pressure of the incumbent viscera in the full abdomen. Its great utility appears from its constancy, being found in almost all animals; nor is this refuted by the few experiments in which a part of it was cut out from a robust animal, without occasioning death; because the whole pancreas cannot be removed without the duodenum: for even a part of the lungs may be cut out without producing death, but they are not, therefore, useless. It seems principally to dilute the viscid cystic bile, to mitigate its acrimony, and to mix it with the food. Hence it is poured into a place remote from the duct from the liver, as often as there is no gall-bladder. Like the rest of the intestinal humours, it dilutes and resolves the mass of aliments, and performs every other office of the saliva.

Pancreatic duct. See *Ductus pancreaticus.*

Pancreatic juice. See *Pancreas.*

Pancre′ne. (From πας, all, and κρηνη, a fountain.) A name of the pancreas from its great secretion.

Pandali′tium. A whitlow.

PANDEMIC. (*Pandemicus*; from παν, all, and δημος, the people.) A synonym of epidemic. See *Epidemic.*

Pandicula′tio. (From *pandiculo*, to gape and stretch.) Pandiculation, or that restless stretching and gaping which accompanies the cold fit of an ague.

PA′NICUM. (A *paniculis*, from its many panicles; the spike consisting of innumerable thick seeds, disposed in many panicles.) The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Digynia.*

Pa′nicum Ita′licum. The systematic name of the plant which affords the Indian millet-seed, which is much esteemed in Italy, being a constant ingredient in soups, and made into a variety of forms for the table.

Pa′nicum milia′ceum. The systematic name of the plant which affords the millet-seed. They are esteemed as a nutritious article of diet, and are often made into puddings in this country.

Pa′nis cu′culi. See *Oxalis acetosella.*

Pa′nis porci′nus. A species of cyclamen.

PANNI′CULUS. (From *pannus*, cloth.) 1. A piece of fine cloth.

2. The cellular and carnous membranes

are so called from their resemblance to a piece of fine cloth.

Panno'nica. (From *pannus*, a rag; so called because its stalk is divided into many uneven points, like the end of a piece of rag.) Hawk-weed.

Pa'nnus. (From πενω, to labour.) 1. A piece of cloth.

2. A tent for a wound.

3. A speck in the eye, resembling a bit of rag.

4. An irregular mark upon the skin.

Pano'ctiæ. Buboes in the groin.

PANOPHO'BIA. (From παν, all, and φοβος, fear.) That kind of melancholy which is attended with groundless fears.

Pansies. See *Viola tricolor.*

Pantago'ga. (From πας, all, and αγω, to drive out.) Medicines which expel all morbid humours.

Panto'lmius. (From πας, all, and τολμαω, to dare; so named from its general uses.) A medicine described by Ægineta.

Pantopho'bia. The same as hydrophobia.

Pa'nus. (From πενω, to work.) 1. A weaver's roll.

2. A soft tumour shaped like a weaver's roll.

PAPA'VER. (*Papaver*, from *pappa*, pap; so called because nurses used to mix this plant in children's food to relieve the colic and make them sleep.) 1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.* The poppy.

2. The pharmacopœial name of the white poppy. See *Papaver somniferum.*

Papa'ver erra'ticum. See *Papaver rhœas.*

Papa'ver ni'grum. The black poppy. This is merely a variety of the *papaver somniferum*, producing black seeds. See *Papaver.*

Papa'ver rhœ'as. The systematic and pharmacopœial name of the red corn poppy. *Papaver erraticum. Papaver capsulis glabris globosis, caule-piloso multifloro; foliis pennatifidis incisis,* of Linnæus. The heads of this species, like those of the somniferum, contain a milky juice of a narcotic quality; from which an extract is prepared, that has been successfully employed as a sedative. The flowers have somewhat of the smell of opium, and a mucilaginous taste, accompanied with a slight degree of bitterness. A syrup of these flowers is directed in the London Pharmacopœia, which has been thought useful as an anodyne and pectoral, and is prescribed in coughs and catarrhal affections. See *Syrupus rhœados.*

Papa'ver somni'ferum. The systematic name of the white poppy, from which opium is obtained. Linnæus describes the plant:—*Papaver calycibus, capsulisque glabris, foliis amplexicaulibus incisis.* This drug is also called *opium thebaicum*, from being anciently prepared chiefly at Thebes: *Opion* and *manus dei*, from its extensive medical virtues, &c. The Arabians called it *affion* and *afium.* It is the concreted milky juice of the capsule or head of the poppy. It is brought from Turkey, Egypt, the East Indies, and other parts of Asia, where poppies are cultivated for this use in fields, as corn among us. The manner in which it is collected has been described long ago by Kæmpfer and others; but the most circumstantial detail of the culture of the poppy, and the method of procuring the opium, is that given by Mr. Kerr, as practised in the province of Bahar: he says, "The field being well prepared by the plough and harrow, and reduced to an exact level superficies, it is then divided into quadrangular areas of seven feet long, and five feet in breadth, leaving two feet of interval, which is raised five or six inches, and excavated into an aqueduct for conveying water to every area, for which purpose they have a well in every cultivated field. The seeds are sown in October or November. The plants are allowed to grow six or eight inches distant from each other, and are plentifully supplied with water; when the young plants are six or eight inches high, they are watered more sparingly. But the cultivator spreads all over the areas a nutrient compost of ashes, human excrements, cow-dung and a large portion of nitrous earth, scraped from the highways and old mud walls. When the plants are nigh flowering, they are watered profusely, to increase the juice.

When the capsules are half grown, no more water is given, and they begin to collect the opium.

At sunset they make two longitudinal double incisions upon each half ripe capsule, passing from below upwards, and taking care not to penetrate the internal cavity of the capsule. The incisions are repeated every evening until each capsule has received six or eight wounds; then are they allowed to ripen their seeds. The ripe capsules afford little or no juice. If the wound was made in the heat of the day, a cicatrix would be too soon formed. The night dews, by their moisture, favour the exstillation of the juice.

Early in the morning, old women, boys, and girls, collect the juice by scraping it off the wounds with a small iron scoop, and deposit the whole in an earthen pot, where it is worked by the hand in the open sunshine, until it becomes of a considerable spissitude. It is then formed into cakes of a globular shape, and about four pounds in weight, and laid into little earthen basins to be further exsiccated. These cakes are covered over with the poppy or tobacco leaves, and dried until they are fit for sale. Opium is frequently adulterated with cow-dung, the extract of the poppy plant procured by boiling, and various other substances which they keep in secresy."

This process, however, is now but rarely practised, the consumption of this drug being too great to be supplied by that method of collection.

The best sort of the *officinal opium* is the expressed juice of the heads, or of the heads and the upper part of the stalks inspissated by a gentle heat; this was formerly called meconium, in distinction from the true opium, or juice which issues spontaneously.

The inferior sorts (for there are considerable differences in the quality of this drug,) are said to be prepared by boiling the plant in water, and evaporating the strained decoction; but as no kind of our opium will totally dissolve in water, the juice is most probably extracted by expression. Newman was informed by some Turks at Genoa and Leghorn, that in some places the heads, stalks, and leaves are committed to the press together, and that this juice inspissated affords a very good opium.

On this head Dr. Lewis remarks, that the point has not yet been fully determined. It is commonly supposed, that whatever preparations the Turks may make from the poppy for their own use, the opium brought to us is really the milky juice collected from incisions made in the heads, as described by Kæmpfer. It is certain that an extract made by boiling the heads, or the heads and stalks in water, is much weaker than opium; but it appears also, that the pure milky tears are considerably stronger.

The principles separable from opium are, a resin, gum, besides a minute portion of saline matter, and water and earth, which are intimately combined together, insomuch that all the three dissolve almost equally in water and in spirit. It is probably to the saline principle Nicholson observes in this and other vegetables that the intimacy of union is in great measure to be ascribed.

Four ounces of opium, treated with alkohol, yielded three ounces and four scruples of resinous extract; five drachms and a scruple of insoluble impurities remaining. On taking four ounces more, and applying water at first, Newman obtained two ounces five drachms and one scruple of gummy extract; the insoluble part amounting here to seven drachms and a scruple. In distillation, alkohol brought over little or nothing; but the distilled water was considerably impregnated with the peculiar ill smell of opium.

From this analysis may be estimated the effects of different solvents upon it. Alcohol and proof spirit dissolving its resin, afford tinctures possessing all its virtues. Water dissolves its gummy part, which is much less active, but a part of the resin is at the same time taken up by the medium of the gum. Wines also afford solutions possessing the virtues of opium. Vinegar dissolves its active matter, but greatly impairs its power.

The use of this celebrated medicine, though not unknown to Hippocrates, can be clearly traced to Diagoras, who was nearly his cotemporary, and its importance has ever since been gradually advanced by succeeding physicians of different nations. Its extensive practical utility, however, has not been long well understood; and in this country perhaps may be dated from the time of Sydenham. Opium is the chief narcotic now employed; it acts directly upon the nervous power, diminishing the sensibility, irritability, and mobility of the system; and, according to Cullen, in a certain manner suspending the motion of the nervous fluid to and from the brain, and thereby inducing sleep, one of its principal effects. From this sedative power of opium, by which it allays pain, inordinate action, and restlessness, it naturally follows that it may be employed with advantage in a great variety of diseases. Indeed, there is scarcely any disorder in which, under some circumstances, its use is not found proper; and though in many cases it fails of producing sleep, yet, if taken in a full dose, it occasions a pleasant tranquillity of mind, and a drowsiness, which approaches to sleep, and which always refreshes the patient. Besides the sedative power of opium, it is known to act more or less as a stimulant, exciting the motion of the blood. By a certain conjoined effort of this sedative and stimulant effect, opium has been thought to produce intoxication, a quality for which it is much used in eastern countries.

The principal indications which opium is capable of fulfilling are, supporting the actions of the system, allaying pain and irritation, relieving spasmodic action, inducing sleep, and checking morbidly increased secretions. It is differently administered, as it is designed to fulfil one or other of these indications.

Where opium is given as a stimulus, it ought to be administered in small doses, frequently repeated, and slowly increased, as by this mode the excitement it produces is best kept up. But where the design is to mitigate pain or irritation, or the symptoms arising from these, it ought to be given in a full dose, and at distant intervals, by which the state of diminished power and sensibility is most completely induced.

One other general rule, with respect to the administration of opium, is, that it ought not to be given in any pure inflammatory affection, at least until evacuations have been used, or unless means are employed to determine it to the surface, and produce a diaphoresis.

In continued fevers, not of the pure inflammatory kind, opium is administered sometimes as a general stimulus, and at other times to allay irritation. The great practical rule in such cases is, that it ought to be given in such qnantities only, that the pulse becomes slower and fuller from its operation. Its exhibition is improper where local inflammation, especially of the brain, or of its membranes, exists.

In intermittent fever, the exhibition of an opiate renders the paroxysms milder, and facilitates the cure. Dr. Cullen recommends the union of opium with bark, which enables the stomach to bear the latter in larger doses, and adds considerably to its efficacy.

In the profluvia and cholera, opium is employed to lessen the discharge, and is frequently the principal remedy in effecting the cure. In passive hœmorrhagy, it proves useful by its stimulant power. In retrocedent gout it is used as a powerful stimulant.

In convulsive and spasmodic diseases it is advantageously administered, with the view of relieving symptoms, or even of effecting a permanent cure, and in several of them it requires to be given to a very great extent.

In lues venerea it promotes the action of mercury, and relieves the irritation arising either from that remedy, or from the disease.

In the year 1779, opium was introduced into practice as a specific against the lues venerea. It was employed in several of the military hospitals, where it acquired the reputation of a most efficacious remedy; and Dr. Michaelis, physician of the Hessian forces, published an account of a great number of successful experiments made with it, in the first volume of the Medical Communications in the year 1784. Opium was afterwards given as an anti-venereal remedy in some foreign hospitals. Many trials were also made of its virtues in several of the London hospitals, and in the Royal Infirmary at Edinburgh. Very favourable reports of its efficacy in removing venereal complaints were published by different practitioners; but, at the same time, so many deductions were to be made, and so many exceptions were to be admitted, that it required little sagacity to discover, that most of the advocates for this medicine reposed but a slender and fluctuating confidence in its anti-venereal powers. Mr. Pearson made several experiments on the virtues of opium in lues venerea, at the Lock Hospital, in the year 1784 and 1785; and published a narrative of its effects, in the second volume of the Medical Communications. "The result of my experiments," says he, "was very unfavourable to the credit of this new remedy; and I believe that no surgeon in this country relies on opium as a specific against the venereal virus. I have been long accustomed to administer opium with great freedom during the venereal course; and the experience of nearly twenty years has taught me that, when it is combined with mercury, the proper efficacy of the latter is not in any measure increased; that it would not be safe to rely upon a smaller quantity of the mineral specific, nor to contract the mercurial course within a shorter limit than where no opium has been employed. This representation will not, I presume, admit of controversy; yet we frequently hear people expressing themselves upon this head, as if opium manifested some peculiar qualities in venereal complaints, of a distinct nature from its well known narcotic properties, and thus afforded an important aid to mercury in the removal of lues venerea." Perhaps it may not be unuseful to disentangle this subject from the perplexity in which such indefinite language necessarily involves it. Opium, when given in conjunction with mercury, by diminishing the sensibility of the stomach and bowels, prevents many of those inconveniencies which this mineral is apt to excite in the primæ viæ; and thus its admission into the general system is facilitated. Mercury will likewise often produce a morbid irritability, accompanied with restlessness and insomnolescnce, and it sometimes renders venereal sores painful and disposed to spread. These accidental evils, not necessarily connected with the venereal disease, may be commonly alleviated, and often entirely removed, by a judicious administration of opium; and the patient will consequently be enabled to persist in using the mineral specific. It, however, must be perfectly obvious, that opium, in conferring this sort of relief, communicates no additional virtues to mercury, and that, in reality, it assists the constitution of the patient, not the operation of the medicince with which is is combined. The salutary effects of mercury as an antidote, may be diminished or lost by the supervention of vomiting, dysentery, &c. Opium will often correct these morbid appearances, and so will spices, wine, and appropriate diet, &c. yet it would be a strange use of words to urge, wherever these articles of food were beneficial to a venereal patient, that they concurred in augmenting the medicinal virtues of mercury. It may be supposed that the majority of medical men would understand by the terms, "to assist a medicine in curing a contagious disease," that the drug conjoined with the specific actually increased its medicinal efficacy; whereas, in the instances before us, it is the human body only which has been aided to resist the operation of certain noxious powers, which would render a perseverance in the antidote prejudicial or impossible. The soothing qualities of this admirable medicine can scarcely be estimated too highly. Yet we must beware of ascribing effects to them which have no existence; since a confidence in the anti-venereal virtue of opium would be a source of greater mischief, than its most valuable properties would be able to compensate.

Opium is employed with laxatives in colic, and often prevents ileus and inflammation, by relieving the spasm.

It is often given to promote healthy suppuration, and is a principal remedy in arresting the progress of gangrene.

The sudorific property of opium is justly considered of considerable power, more especially in combination with ipecacuan or antimony. The compound powder of ipecacuan, consisting of one part of ipecacuan, one part of opium, and eight of sulphate of potash, is a very powerful sudorific, given in a dose from 15 to 25 grains. The combination of opium with antimony is generally made by adding 30 to 40 drops of antimonial wine to 25 or 30 drops of tincture of opium, and forming them into a draught.

Opium, taken into the stomach in immoderate doses, proves a narcotic poison, producing vertigo, tremors, convulsions, delirium, stupor, stertor, and, finally, fatal apoplexy.

Where opium has been taken so as to produce these dangerous consequences, the contents of the stomach are first to be evacuated by a powerful emetic, as a solution of the sulphate of zinc. Large draughts of vinegar, or any of the native vegetable acids, are then to be swallowed. Moderate doses of brandy, or a strong infusion of coffee, have also been found useful.

Respecting the external application of opium, authors seem not sufficiently agreed. Some allege, that when applied to the skin it allays pain and spasm, procures sleep, and produces all the salutary or dangerous effects which result from its internal use; while others say, that thus applied it has little or no effect whatever. It has also been asserted, that when mixed with caustic it diminishes the pain which would otherwise ensue; and if this be true, it is probably by decreasing the sensibility of the part. Injected by the rectum, it has all the effect of opium taken into the stomach; but to answer this purpose, double the quantity is to be employed. Applied to the naked nerves of animals, it produces immediate torpor and loss of power in all the muscles with which the nerves communicate.

The requisite dose of opium varies in different persons and in different states of the same person. A quarter of a grain will in one adult produce effects which ten times the quantity will not do in another; and a dose that might prove fatal in cholera or colic, would not be perceptible in many cases of tetanus, or mania. The lowest fatal dose to those unaccustomed to take it, seems to be about four grains; but a dangerous dose is so apt to produce vomiting, that it has seldom time to occasion death. When given in too small a dose, it often produces disturbed sleep, and other disagreeable consequences; and in some cases it seems impossible to be made to agree in any dose or form. Often on the other hand, from a small dose, sound sleep and alleviation of pain will be produced; while a larger one occasions vertigo and delirium. Some prefer the repetition of small doses; others the giving a full dose at once; its operation is supposed to last about eight hours; this however must depend upon circumstances. The usual dose is one grain. The officinal preparations of this drug are numerous. The following are among the principal: *Opium purificatum*, *pilula saponis cum opio*, *pulvis cornu usti cum opio*, *tinctura opii*, *tinctura camphoræ composita*, and *confectio opii*: it is also an ingredient in the *pulvis ipecacuanhæ compositus*, *electuarium japonicum*, *pulvis cretæ compositus cum opio*, &c. The capsules of the poppy are also directed for medicinal use in the form of fomentation, and in the *syrupus papaveris*, a useful anodyne, which often succeeds in procuring sleep where opium fails; it is, however, more especially adapted to children. The seeds of this species of poppy contain a bland oil, and in many places are eaten as food; as a medicine, they have been usually given in the form of emulsion in catarrhs, stranguries, &c.

Papaw. The fruit of the *carica papaya*, which see.

PAPI'LLA. 1. The nipple of the breast. See *Nipple.*

2. The fine terminations of nerves, &c. as the nervous papillæ of the tongue, skin, &c.

Papi'llæ medulla'res. Small eminences on the medulla oblongata.

Papilla'ris he'rba. See *Lapsana.*

Pa'ppus. The hair on the middle of the chin. See *Capillus.*

PA'PULA. (*Papula*, dim. of *pappa*, a dug or nipple.) A very small and acuminated elevation of the cuticle, with an inflamed base, not containing a fluid, nor tending to suppuration. The duration of papulæ is uncertain, but they terminate for the most part in scurf.

Pa'r cuculla're. So Casserius calls the *Musculus Crico Arytænoideus.*

PAR VA'GUM. (*Par*, a pair.) The eighth pair of nerves. They arise from the corpora olivaria of the medulla oblongata, and proceed into the neck, thorax, and abdomen. In the neck the par vagum gives off two branches, the lingual and superior laryngeal; and, in the thorax, four branches, the recurrent laryngeal, the cardiac, the pulmonary, and the œsophageal plexuses. At length the trunks of the nervi vagi, adjacent to the mediastinum, run into the stomach, and there form the stomachic plexus, which branches to the abdominal plexuses.

PARACELSUS, a native of Switzerland, born about the year 1493. His father is said to have been a practitioner in medicine, and inspired him with a taste for chemistry. He very early commenced a sort of rambling life, assuming the pompous names of *Philippus, Aureolus, Theophrastus, Paracelsus, Bombastus de Hohenheim*; and after visiting the schools of France, Italy, and Germany, he sought for information during several years among quacks of every description, pretending that he had found the principles of the medical art altogether erroneous. He appears to have possessed the talent of imposing upon mankind in an eminent degree, for even the learned Erasmus is said to have consulted him. It cannot be a matter of surprise, that by the bold use of active medicines, especially mercury, antimony, and opium, he should have effected some remarkable cures: these cases were displayed with the usual exaggeration, while those, in which he failed, or did mischief, passed unnoticed. His reputation, however, became so great, that the magistrates of Basle engaged him, at a large salary, to fill the chair of medicine in their university. Accordingly, in 1527, he began delivering lectures, sometimes in barbarous Latin, oftener in German; but though he gained at first some enthusiastic adherents, the ridiculous vanity, which he displayed, despising every other authority in medicine, whether ancient or modern, soon created such disgust, that he was left without an audience. A quarrel with the magistrates, on account of a decision against his demand of fees, which was deemed exorbitant, decided him in the following year to leave the place. He subsequently resided in Alsace, and other parts of Germany, leading a life of extreme intemperance in the lowest company; yet occasional instances of extraordinary success in his practice still preserved him some reputation, notwithstanding numerous failures. But the most striking proof of the folly of his pretensions was given in his own person; for after announcing that he was in possession of an elixir, which would prolong human life to an indefinite period, he died at Saltzburg in 1541 of a fever. It must be acknowledged, however, that Paracelsus was of material service to medicine, by showing that many active medicines might be safely employed; and particularly as having been one of the first to exhibit mercury in the cure of syphilis, which had been in vain attempted by the Galenical remedies then in use. He published little during his life, but a great number of posthumous treatises appeared under his name, which are too replete with absurdities to deserve enumeration.

PARACENTE'SIS. (From *ϖαράκεντεω*, to pierce through.) The operation of tapping to evacuate the water in ascites, dropsy of the ovarium, &c.

Paracma'sticos. (From *παρκμαζω*, to decline.) *Paracme.* The declension of any distemper; also, according to Galen, that part of life, where a person is said to grow old, and which he reckons from 35 to 49, when he is said to be old.

Para'coe. (From *παρα*, dim. and *ακουω*, to hear.) Difficult hearing, dulness of hearing.

Paracolle'tica. (From *παρακολλαομαι*, to glue together.) Agglutinants; substances which unite parts preternaturally separated.

Para'cope. (From *παρακοπτω*, to be delirious.) In Hippocrates it is a slight delirium.

Paracru'sis. (From *παρακρουω*, to deprecate.) A slight disarrangement of the faculties where the patient is inattentive to what is said to him.

PARACU'SIS. (From *ϖαρα*, wrong, and *ακουω*, to hear.) Depraved hearing. Deafness. A genus of disease in the Class *Locales*, and Order *Dysæsthesiæ*, of Cullen. There are two species, 1. *Paracusis imperfecta. Surditas.* When existing sounds are not heard as usual. 2. *Paracusis imaginaria*, called also *susurrus. Syrigmus. Syringmos. Tinnitus aurium.* When imaginary sounds are heard, not from without, but excited within the ear.

Paracyna'nche. (From *παρα*, *κυων*, a dog, and *αγχω*, to strangle.) A species of *Quinsy*: it being a distemper to which dogs are subject.

Paradi'sus. (Heb.) A pungent seed resembling the cardamom, is named *granum paradisi*, from its virtues.

Paradisi grana. See *Amomum.*

Paraglo'ssa. (From *παρα*, and *γλωσσα*, the tongue.) A prolapsus of the tongue, a swelled tongue.

Parago'ge. (From *παραγω*, to adduce.) This term signifies that fitness of the bones to one another, which is discernible in their articulation; and bones which are thereby easier of reduction, when dislocated, are by Hippocrates called *παραγωγοτερα*.

Parala'mpsis. (From *παραλαμπω*, to shine a little.) Some writers use this word to express a cicatrix in the transparent part of the cornea of the eye.

Paralla'gma. (From *παραλλαττω*, to change.) *Parallaxis.* The transmutation of a solid part from its proper place, as where one part of a broken bone lies over another.

Paralla'xis. See *Parallagma.*

Paralle'la. (From *παραλληλος*, parallel.) A sort of scurf or leprosy, affecting only the palms of the hands, and running down them in parallel lines; it happens sometimes in the venereal disease.

Paralo'gia. (From παραλεγω, to talk absurdly.) A delirium in which the patient talks wildly.

Paralo'phia. (From παρα, near, and λοφια, the first vertebra of the back.) Thus some anatomical writers, as Keil, &c. express the lower and lateral part of the neck near the vertebræ.

PARA'LYSIS. (From παραλυω, to loose or weaken.) *Catalysis. Attonitus morbus. Stupor. Tremor.* The palsy. A genus of disease in the Class *Neuroses,* and Order *Comata,* of Cullen, known by a loss or diminution of the power of voluntary motion, affecting certain parts of the body, often accompanied with drowsiness. In some instances, the disease is confined to a particular part; but it more usually happens that one entire side of the body from the head downwards is affected. The species are: 1. *Paralysis partialis,* partial, or palsy of some particular muscle. 2. *Paralysis hemiplegica,* palsy of one side longitudinally. 3. *Paralysis paraplegica,* palsy of one half of the body, taken transversely, as both legs and thighs. 4. *Paralysis venenata,* from the sedative effects of poisons. Paralysis is also symptomatic of several diseases, as worms, scrophúla, syphilis, &c.

It may arise in consequence of an attack of apoplexy. It may likewise be occasioned by any thing that prevents the flow of the nervous power from the brain into the organs of motion; hence tumours, over distension and effusion, often give rise to it. It may also be occasioned by translations of morbid matter to the head, by the suppression of usual evacuations, and by the pressure made on the nerves by luxations, fractures, wounds, or other external injuries. The long continued application of sedatives will likewise produce palsy, as we find those, whose occupations subject them to the constant handling of white lead, and those who are much exposed to the poisonous fumes of metals or minerals, are very apt to be attacked with it. Whatever tends to relax and enervate the system, may likewise prove an occasional cause of this disease.

Palsy usually comes on with a sudden and immediate loss of the motion and sensibility of the parts; but in a few instances, it is preceded by a numbness, coldness, and paleness, and sometimes by slight convulsive twitches. When the head is much affected, the eye and mouth are drawn on one side, the memory and judgment are much impaired, and the speech is indistinct and incoherent. If the disease affects the extremities, and has been of long duration, it not only produces a loss of motion and sensibility, but likewise a considerable flaccidity and wasting away in the muscles of the parts affected.

When palsy attacks any vital part, such as the brain, heart, or lungs, it soon terminates fatally. When it arises as a consequence of apoplexy, it generally proves very difficult of cure. Paralytic affections of the lower extremities ensuing from any injury done to the spinal marrow, by blows and other accidents, usually prove incurable. Palsy, although a dangerous disease in every instance, particularly at an advanced period of life, is sometimes removed by the occurrence of a diarrhœa or fever.

The morbid appearances to be observed on dissections in palsy, are pretty similar to those which are to be met with in apoplexy; hence collections of blood, and of serous fluids, are often found effused on the brain, but more frequently the latter, and in some instances the substance of this organ seems to have suffered an alteration. In palsy as well as in apoplexy, the collection of extravasated fluid is generally on the opposite side of the brain to that which is affected.

The general indications are, to remove, as far as possible, any compressing cause, and to rouse gradually the torpid portion of the nervous system. It will sometimes be proper, where the attack is sudden, the disease originating in the head, with great determination of blood to that part, particularly in a plethoric habit, to open the temporal artery, or jugular vein, or apply cupping-glasses to the neck, and exhibit active purges, with the other means, pointed out under apoplexy. But where the patient is advanced in life, of a debilitated constitution, and not too full of blood, the object should rather be to procure regular and healthy discharges from the bowels, obviate irritation in the brain by blisters in the neighbourhood, and procure a steady determination to the skin by gently stimulant diaphoretics, as ammonia, guiacum, &c. in moderate doses regularly persevered in. Emetics have been sometimes very useful under these circumstances, but would be dangerous where congestion in the brain existed. Certain narcotic substances have been found occasionally successful, as aconite, arnica, toxicondendron, nux vomica, and opium; but the tendency of the latter to produce fulness of the vessels of the head must greatly limit its use. Various local means of increasing the circulation, and soliciting nervous energy into the affected parts, are resorted to in this complaint, often with decided benefit. In all cases it is proper to keep up sufficient warmth in the limb, or the disease may be rendered incurable. But in addition to this, in tedious cases, fomentations, the vapour bath, friction, electricity, and a variety of stimulant, rubefacient, or even vesicatory, embrocations, liniments, and plasters, may assist materially in the recovery of the patient. In the use of some of these it should be a rule to begin near the boundary of the disease, and carry them onward, as the amendment proceeds, not only as they will be more likely to answer a good purpose, but also because there would be some risk in stimulating too powerfully an extreme part. A suitable diet, according to the habit of the patient, warm clothing, the prudent use of the bath, and other means calculated to strengthen the system, must not be neglected.

Para′lysis he′rba. (From παραλυω, to weaken; so called from its use in paralytic disorders.) The cowslip and primrose are sometimes so termed. See *Primula veris*, and *Primula vulgaris*.

Parame′ria. (From παρα, near, and μηρος, the thigh.) The inward parts of the thigh.

Para′mesus. (From παρα, near, and μεσος, the middle.) The ring finger, or that which is between the middle and the little fingers.

Paranœ′a. *Paranoia.* (From παρα, dim. and νοεω, to understand.) Alienation of mind; defect of judgment.

Parape′chyum. (From παρα, near, and πηχυς, the cubit.) That part of the arm from the elbow to the wrist.

PARAPHIMO′SIS. (From παρα, about, and φιμοω, to bridle.) The paraphimosis is a disorder wherein the prepuce, being retracted toward the root of the penis, cannot be returned again over the glans, but makes a sort of ligature behind the corona. It is easily known; the glans is uncovered, the skin tumefied on the corona, and above it forms a circular collar or stricture, which, from the skin being unequally extended, becomes indented, and makes several rings round the part. This disease may proceed from two causes; as first from the imprudence of young people, and sometimes also of grown persons who having the end of their prepuce too straight, cannot uncover their glans without pain, and when they have done it, neglect returning it so soon as they ought; and thus the contracted part of the prepuce forms a constriction behind the glans. Soon after, the glans and penis swell, and the prepuce, being consequently very much distended, is affected in the same manner; an inflammation seizes upon both, and swellings quickly appear upon the stricture formed by the prepuce, so that the whole may be liable to a gangrene, if not speedily relieved. The second thing that may produce a paraphimosis, is a venereal virus. In adults, whose glans is uncovered, there frequently arise venereal chancres in the prepuce after impure coition, which before they digest, are generally attended with inflammation, more or less considerable. This inflammation is alone sufficient to render the prepuce too straight for the size of the penis, in consequence of which a swelling or inosculation may ensue like that before mentioned; and this is what is termed a paraphimosis.

PARAPHO′NIA. (From παρα, wrong, and φωνη, sound.) Alteration of the voice. A genus of disease in the Class *Locales*, and Order *Dyscinesiæ*, of Cullen, comprehending six species, viz. *paraphonia puberum*, *paraphonia rauca*, *paraphonia resonans*, *paraphonia palatina*, *paraphonia clangens*, and *paraphonia comatosa*.

Para′phora. (From παραφερω, to transfer.) A slight kind of delirium, or lightheadedness in a fever: some use this word for a delirium in general.

Paraphrene′sis. A delirium; also paraphenitis.

PARAPHRENI′TIS. (From παρα, dim. and φρην, the mind.) *Diaphragmatitis.* An inflammation of the diaphragm. A genus of disease in the Class *Pyrexiæ*, and Order *Phlegmasiæ*, of Cullen, known by delirium, with difficulty of breathing, and pain in the region of the diaphragm.

Paraphro′syne. (From παραφρονεω, to be estranged in mind.) The same as *Mania*.

Paraphymo′sis. See *Paraphimosis*.

PARAPLE′GIA. (From παραπλησσω, to strike inharmoniously.) Palsy of one half of the body taken transversely. A species of paralysis. See *Paralysis*.

Parapople′xia. (From παρα, dim. and αποπληξια, an apoplexy.) A slight apoplexy.

Pararthre′ma. (From παρα, and αρθρον, a joint.) A slight luxation; a tumour from protrusion, as an hernia.

Pararthre′mata. Plural of *pararthrema*, and synonymous with *ectopiæ*.

Parary′thmos. (From παρα, and ρυθμος, number.) A pulse not suitable to the age of the person.

Parascepa′stra. (From παρα, and σκεπαζω, to cover.) A cap or bandage to go round the whole head.

Para′schide. (From παρα, and σχιζω, to cleave.) A fragment or fissure in a broken bone.

PARASITIC. (*Parasiticalis*; from παρασιτος, a parasite or hanger on.) Animals and plants are so termed that receive their nourishment in the bodies of others, as worms, polypes, hydatids, &c.

Para′sphagis. (From παρα, near, and σφαγη, the throat.) The part of the neck contiguous to the clavicles.

Para′stata. (From παριςημι, to stand near.) It signifies any thing situated near another.

Para′statæ. (From παριστημι, to stand near.) In Hippocrates it signifies the *Epididymis*. Herophilus and Galen called these the *Varicosæ Parastatæ*, to distinguish them from the *Glandulosæ Parastatæ*, now called *Prostatæ*. Rufus Ephesius called the tubæ

Fallopianæ by the name of *Parastatæ Varicosæ.*

Parastre′mma. (From ϖαραστρεφω, to distort, or pervert.) A perversion, or convulsive distortion of the mouth, or any part of the face.

Parasyna′nche. A species of *Quinsy.* See *Paracynanche.*

Para′thenar. (From παρα, near, and ϑεναρ, the sole of the foot.) A muscle situated near the sole of the foot.

Para′thenar mi′nor. See *Flexor brevis minimi digiti pedis.*

Parda′lium. (From παρδος, the panther.) An ointment smelling like the panther.

PARE′, Ambrose, a French surgeon, was born at Lavel in 1509. He commenced the study of the surgical profession early in life, and practised it with great zeal both in hospitals and in the army. His reputation at length rose very high, and he was appointed surgeon in ordinary to Henry II. in 1552; which office he held also under the three succeeding kings. Charles IX. derived material assistance from his professional skill, and gave a signal proof of his gratitude; for Paré, being a Huguenot, would have been included in the horrible massacre of St. Bartholomew's, had not the king sent for him on the preceding night, and ordered him not to leave the royal chamber. After having been long esteemed as the first surgeon of his time, and beloved for his private virtues, he died in the year 1590. He was the author of some works, which were universally read, and translated into most of the languages of Europe, containing a body of surgical science. He was a man of original mind, and a real improver of his art, especially in the treatment of gun-shot wounds; adopting a lenient method, instead of the irritating and cauterizing applications previously in use. He was also a bold and successful operator, and displayed on many occasions all the resources of an enlightened surgeon. He appears however to have borrowed freely from the Italian writers and practitioners, especially in anatomy. There is also an affectation of reference to the works of the antients in his writings, for he was by no means well versed in these, and indeed obliged to request another to translate into French some of the books of Galen, which he wished to consult.

Paregoric Elixir. See *Tinctura camphoræ composita.*

PAREGORICS. (*Medicamenta paregorica,* παρηγορικος; from ϖαραγορεω, to mitigate, to assuage.) Medicines that allay pain are so termed.

Parei′a. Παρεια. That part of the face which is between the eyes and chin.

Parei′ra bra′va. See *Cissampelos.*

Parence′phalis. (From ϖαρα, near, and εγκεφαλος, the brain.) See *Cerebellum.*

PARE′NCHYMA. (From ϖαρεγχυω, to strain through, because the antients believed the blood was strained through it.) The spongy and cellular substance that connects parts together. It is now only, in anatomy, applied to the connecting medium of the substance of the lungs.

PA′RESIS. (From ϖαριημι, to relax.) An imperfect palsy.

PARIE′RA BRA′VA. (Span.) See *Cissampelos.*

PARIETAL BONES. (*Parietalis,* from *paries,* a wall, because they defend the brain like walls.) *Ossa verticis. Ossa sincipitis. Ossa verticalia vel bregmatis.* Two arched and somewhat quadrangular bones, situated one on each side of the superior part of the cranium. Each of these bones forms an irregular square. They are thicker above than below; but are somewhat thinner, and at the same time more equal and smooth than the other bones of the cranium. The only foramen we observe in them, is a small one towards the upper and posterior part of each. It has been named the parietal foramen, and serves for the transmission of a small vein to the longitudinal sinus. In many subjects this foramen is wanting. On the inner surface of these bones are the marks of the vessels of the dura mater, and of the convoluted surface of the brain. On the inside of their upper edge we may likewise observe a considerable furrow, which corresponds with the longitudinal sinus of the dura mater; and lower down, towards their posterior and inferior angle, is a smaller one for part of the lateral sinuses. These bones are joined to each other by the sagittal suture; to the os sphenoides, and ossa temporum, by the squamous suture; to the os occipitis by the lambdoidal suture; and to the os frontis by the coronal suture. Their connection with this latter bone is well worthy our attention. We shall find, that in the middle of the suture, where the os frontis from its size and flatness is the most in danger of being injured, it rests upon the arch formed by the parietal bones; whereas at the sides, the parietal bones are found resting upon the os frontis, because this same arch is there in the greatest danger from pressure. In new-born infants, the ossa parietalia are separated from the middle of the divided os frontis by a portion of the cranium, then unossified. When the finger is applied to this part, the motion of the brain, and the pulsation of the arteries of the dura mater, may be easily distinguished. In general, the whole of this part is completely ossified before we are seven years of age.

PARIETA′RIA. (From *paries,* a wall; because it grows upon old walls, and among rubbish.) 1. The name of a genus of plants in the Linnæan system. Class, *Polygamia.* Order, *Monoecia.*

2. The pharmacopœial name of the wall pellitory. See *Parietaria officinalis.*

Parieta′ria officina′lis. The systematic name of the wall pellitory. *Parietaria; foliis lanceolato-ovatis, pedunculis dichotomis, calycibus diphyllis,* of Linnæus. This plant has no smell, and its taste is simply herbaceous. In the practice of the present day, it is wholly laid aside, although it was formerly in high estimation as a diuretic.

PA′RIS. (So called in reference to the youth of that name, who adjudged the golden apple to Venus, this herb bearing but one seed.) 1. The name of a genus of plants in the Linnæan system. Class, *Octandria.* Order, *Tetragynia.*

2. The pharmacopœial name of the herb Paris. The herb true-love. *Paris quadrifolia,* of Linnæus. The colour and smell of this plant indicate its possessing narcotic powers. The leaves and berries are said to be efficacious in the cure of hooping-cough, and to act like opium. Great caution is requisite in their exhibition, as convulsions and death are caused by an overdose. The root possesses emetic qualities.

Paris quadrifo′lia. The systematic name of the herb Paris. See *Paris.*

Pari′sthmia. (From *ϖαρα,* and *ισθμιον*: the part of the throat where the tonsils are.) A part of the throat near the tonsils, or disorders of the tonsils.

Paristhmio′tomus. (From *ϖαρισθμια,* the tonsils, and *τεμνω,* to cut.) An instrument with which the tonsils were formerly scarified.

Parodo′ntis. (From *ϖαρα,* near, and *οδους,* a tooth.) A painful tubercle upon the gums.

PARONY′CHIA. (From *ϖαρα,* about, and *ονυξ,* the nail.) *Panaris. Panaritium.* A whitlow, or whitloe. Any collection of pus formed in the fingers is termed by authors panaris, or whitloe, and is an abscess of the same nature with those arising in other parts of the body. These abscesses are situated more or less deep, which has induced the writers upon the subject to divide them into several species: accordingly they have ranged them under four heads, agreeably to the places where they are formed. The first kind of panaris is formed under the cuticle, on one side of the nail, and sometimes all round it. The second is seated in the fat lying under the skin, between that and the sheath which involves the flexor tendons. The third is described by authors to be formed within the sheath; and they still add a fourth species, arising between the periosteum and the bone.

Paro′piæ. (From *ϖαρα,* near, and *ωψ,* the eye.) The external angles of the eyes.

Paropte′sis. (From *ϖαρα,* and *οπ7αω,* to roast.) A provocation of sweat, by making a patient approach the fire, or by placing him in a bagnio.

Paroba′sis. (From *ϖαρα,* dim. and *οραω,* to see.) An imbecility of sight.

PARORCHI′DIUM. (From *ϖαρα,* and *ορχις,* a testicle.) A tumour in the groin, occasioned by the testicle, which is passing into the scrotum.

PAROTID GLAND. (*Glandula parotidea;* from *παρα,* about, and *ους,* the ear.) *Parotis.* A large conglomerate and salival gland, situated under the ear, between the mamillary process of the temple bone and the angle of the lower jaw. The excretory duct of this gland opens in the mouth, and is called, from its discoverer, the *Stenonian* duct.

Parotidæ′a. (From *ϖαρωτις,* the parotid gland.) The trivial name of a species of quinsy, in which the parotid gland, neck and throat, are considerably affected. See *Cynanche.*

PARO′TIS. (From *ϖαρα,* near, and *ους,* the ear.) See *Parotid gland.*

PAROXYSM. (*Paroxysmus;* from *ϖαροξυνω,* to aggravate.) A periodical exacerbation or fit of a disease.

Parsley, black mountain. See *Athamanta Oreoselinum.*

Parsley, common. See *Apium Petroselinum.*

Parsley, Macedonian. See *Bubon Macedonicum.*

Parsnip. See *Pastinaca.*

Parsnip, water. See *Sium.*

Parthenia′strum. (Dim. of *parthenium,* tansy.) A species of tansy, or bastard feverfew.

Pa′rthenis. The same as parthenium.

Parthe′nium. (From *ϖαρθενος,* a virgin; so called because of its uses in diseases of young women.) See *Matricaria.*

Parthe′nium mas. See *Tanacetum.*

PARU′LIS. (From *ϖαρα,* near, and *ουλον,* the gum.) An inflammation, boil, or abscess in the gums.

Pary′gron. (From *ϖαρα,* and *υγρος,* humid.) A liquid or moist preparation for allaying a topical inflammation.

Pasi′philus. (From *ϖας,* all, and *φιλος,* grateful; from its general usefulness.) A name given to a vitriolic plaster.

Pa′sma. (From *ϖασσω,* to sprinkle over.) See *Catapasma.*

Pa′ssa. (From *pando,* to spread.) In Paracelsus it is a whitloe.

Pa′ssa mi′nor. See *Uva passa minor.*

Passava′nticus. (From *ϖας,* all, and *αυαινω,* to dry up.) An epithet given by Schroder to a powder, which dries up, and evacuates morbid humours.

PASSIFLO′RA. The name of a genus of plants in the Linnæan system. Class, *Gynandria.* Order, *Pentandria.*

Passiflo′ra laurifo′lia. Bay-leaved passion-flower. A native of Surinam. The fruit grows to the size of a small lemon, which it greatly resembles. They have a delicious smell and flavour, and are excellent for quenching thirst, abating heat of the stomach, increasing the appetite, recruiting the spirits, and allaying the heat in burning fevers.

Passiflo'ra malifo'rmis. Apple-shaped granadilla. The fruit of this species of passion-flower is esteemed a delicacy in the West Indies, where it is served up at table in desserts: they are not unwholesome.

Passion, cœliac. See *Diarrhœa.*

Passion, hysteric. See *Hysteria.*

Passion, iliac. See *Iliac passion.*

Passu'læ majo'res. See *Uva passa major.*

Passula'tum. (From *passula*, a fig, or raisin.) This is a term given by Dispensatory writers to some medicines where raisins are the chief ingredient, as the electuarium passulatum, &c.

Pa'ssum. (From *passa*, a grape, or raisin.) Raisin-wine.

Pa'sta re'gia. (From *ϖασσω*, to sprinkle.) A lozenge, or small cake, sprinkled over with some dry powdered substance.

Pasti'llum. (Dim. of *pasta*, a lozenge.) *Pastillus.* A little lump of paste, or ball, made to take like a lozenge; a troch, or pastil.

PASTINA'CA. (*A pastu;* from its usefulness as a food.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* Parsnep.

2. The pharmacopœial name of the Parsnep. See *Pastinaca sativa.*

Pastina'ca opo'panax. The systematic name of the plant which yields opopanax. The plant from whence this gum resin is produced is known by the names of *opoponacum, panax heracleum, panax costinum, panax pastinacea, kyna,* Hercules all heal, and opopanax-wort. *Pastinaca opopanax, foliis pinnatis, foliolis basi antica excisis,* of Linnæus. Opopanax is the gummi-resinous juice, obtained by means of incisions made at the bottom of the stalk of the plant, from which it gradually exudes, and by undergoing spontaneous concretion, assumes the appearance under which we have it imported from Turkey and the East Indies, viz. sometimes in little drops or tears, more commonly in irregular lumps, of a reddish yellow colour on the outside, with specks of white; internally of a paler colour, and frequently variegated with large white pieces. Opopanax has a strong disagreeable smell, and a bitter, acrid, somewhat nauseous taste. It is only employed in the present practice as an antispasmodic, in combination with other medicines, although it was formerly in high estimation as an attenuant, deobstruent, and aperient. Its antispasmodic virtues are less powerful than galbanum, and more so than ammoniacum. It has no place in the Edinburgh Pharmacopœia, but is directed by the London College.

Pastina'ca sati'va. The systematic name of the parsnep. The cultivated or garden parsnep is the *Pastinaca:—foliolis simpliciter pinnatis,* of Linnæus. *Elaphoboscum,* of the antients. Its roots are sweet and nutritious, and in high esteem as an article of food. They possess an aromatic flavour, more especially those of the wild plant, and are exhibited in calculous complaints for their diuretic and sheathing qualities.

PATE'LLA. (Dim. of *patina*, a dish; so named from its shape.) *Rotula.* The knee-pan. A small flat bone, which, in some measure, resembles the common figure of the heart, with its point downwards, and is placed at the fore-part of the joint of the knee. It is thicker in its middle part than at its edge. Anteriorly it is a little convex, and rough for the insertion of muscles and ligaments; posteriorly, it is smooth, covered with cartilage, and divided, by a middle longitudinal ridge, into two slightly concave surfaces, of which the external one is the largest and deepest. They are both exactly adapted to the pulley of the os femoris. The edges of this posterior surface are rough and prominent, where the capsular ligament is attached, and below is a roughness at the point of the bone, where the upper extremity of a strong tendinous ligament is fixed, which joins this bone to the tuberosity at the upper end of the tibia. This ligament is of considerable thickness, about an inch in breadth, and upwards of two inches in length. The patella is composed internally of a cellular substance, covered by a thin bony plate; but its cells are so extremely minute, that the strength of the bone is, upon the whole, very considerable. In new-born children it is entirely cartilaginous. The use of this bone seems to be, to defend the articulation of the joint of the knee from external injury. It likewise tends to increase the power of the muscles which act in the extension of the leg, by removing their direction farther from the centre of motion, in the manner of a pulley. When we consider the manner in which it is connected with the tibia, we find that it may very properly be considered as an appendix to the latter, which it follows in all its motions, so as to be to the tibia what the olecranon is to the ulna; with this difference, however, that the patella is moveable, whereas the olecranon is a fixed process. Without this mobility, the rotatory motion of the leg would have been prevented.

PATHE'TICI. (*Patheticus;* from *ϖαθος*, an affection; because they direct the eyes to express the passions of the mind.) *Trochleatores.* The fourth pair of nerves. They arise from the crura of the cerebellum laterally, and are distributed in the musculus obliquus superior, *seu* trochlearis.

PATHOGNOMONIC. (*Pathognomonicus;* from ϖαθος, a disease, and γινωσκω, to know.) A term given to those symptoms which are peculiar to a disease. They are also termed proper or characteristic symptoms.

PATHOLOGY. (*Pathologia;* from ϖαθος, a disease, and λογος, a discourse.) The doctrine of diseases. It comprehends *nosology*, *ætiology*, *symptomatology*, *semeiotics*, and *therapeia*.

Patie′ntia. (From *patior*, to bear, or suffer.) The name of the herb monk's rhubarb, from its gentle purging qualities. See *Rumex patientia*.

Patience, garden. See *Rumex patientia*.

Pa′tor na′rium. (From *pateo*, to be opened.) The sinus, cavity, or chasm of the nose.

Pa′trum co′rtex. (So called from the Jesuits, termed fathers in the church of Rome, who first spread its use in Europe.) See *Cinchona*.

Patu′rsa. The venereal disease.

Pauli′na confe′ctio. (From ϖαυω, to rest.) It is a warm opiate, similar to what the London College have called *Confectio Opii*, in their Pharmacopæia. It is the *Paulina* of Aristarchus, which is the same with the *Confectio Archigenis*.

Paul's betony. See *Veronica*.

Pau′lus. See *Ægineta*.

Pava′na. See *Croton Tiglium*.

Pa′vor. (From *Paveo*, to fear; so called from the dread there is of approaching or touching a person affected with it.) The itch.

PEA. A species of pulse of great variety, and much in use as a nourishing article of diet.

Peach. See *Amygdalus Persica*.

Peagle. See *Primula veris*.

Pearl. See *Margarita*.

Pearl-ashes. See *Potassa*.

Pearl barley. See *Hordeum*.

Pear. Of pears there are many varieties, affording a wholesome nourishment.

Peche′dion. Πηχεδιον. The perinæum.

Pechu′rim co′rtex. An highly aromatic bark, the produce of a species of *Laurus*. It is extremely fragrant, like unto that of cinnamon, which it greatly resembles in its properties. In Lisbon it is much esteemed in the cure of dysenteries, and for allaying obstinate vomitings.

Pechu′rim fa′ba. See *Faba pechurim*.

Pechuris. See *Faba pechurim*.

Pechya′gra (From ϖηχυς, the cubit, and αγρα, a seizure.) The gout in the elbow.

Pe′chys. Πηχυς. The cubit, or elbow.

Pechyty′rbe. An epithet for the scurvy.

PECQUET, John, was a native of Dieppe, and graduated at Montpelier. He pursued the study of anatomy with great ardour and ingenuity, which he evinced by the discovery of the thoracic duct, and the receptaculum chyli, while yet a student, in 1647. He then settled to practise in his native town; but soon after repaired to Paris, with a view of demonstrating completely the important vessels which he had discovered; and he succeeded in tracing the progress of the chyle into the left subclavian vein. He published an account of this discovery, with a Dissertation on the Circulation of the Blood, and Motion of the Chyle, in 1651; and his fame, in consequence, speedily extended throughout Europe, though some denied the truth, others the originality of it. Besides his anatomical skill, he was a man of considerable acquirements, and became a Member of the Royal Academy of Sciences. He is said, however, to have shortened his life by an unfortunate attachment to spirituous liquors, and died in 1674.

Pecquet's duct. See *Thoracic duct*.

Pe′cten. The pubes, or share-bone.

PECTINA′LIS. (*Pectinalis,* sc. *musculus;* so named from its arising at the *pecten*, or pubes.) *Pectinæus*, of authors, and *Pubio femoral*, of Dumas. This is a small flat muscle, situated obliquely between the pubes and the little trochanter, at the upper and anterior part of the thigh. It arises broad and fleshy from all the anterior edge of the os pectinis, or pubis, as it is more commonly called, as far its spine, and, descending obliquely backwards and outwards, is inserted by a short and broad tendon, into the upper and anterior part of the linea aspera of the os femoris, a little below the lesser trochanter. This muscle serves to bend the thigh, by drawing it upwards and inwards, and likewise assists in rolling it outwards.

PECTINA′TI MU′SCULI. (*Pectinatus;* from *pecten*, a comb: so named from their supposed resemblance.) The fasciculated muscular fibres of the right auricle of the heart.

Pectinæ′us. See *Pectinalis*.

Pectora′lis. See *Pectoralis major*.

PECTORA′LIS MA′JOR. (*Musculus pectoralis;* from *pectus*, the breast.) *Pectoralis*, of authors, and *sterno-costo-clavio-humeral*, of Dumas. This is a broad, thick, fleshy, and radiated muscle, situated immediately under the integuments, and covering almost the whole anterior part of the breast. Winslow calls it *pectoralis major*, to distinguish it from the serratus anticus, which he has named *pectoralis minor*. It arises from the cartilaginous extremities of the fifth and sixth ribs, from the last of which its tendinous fibres descend over the upper part of the obliquus externus and rectus abdominis, helping to form a part of the sheath in which the latter is included. It likewise springs from almost the whole length of the sternum by short tendinous fibres, which evidently decussate those on the other side; and tendinous and fleshy from more than a third of the anterior part of the clavicle. From these origins the fibres run in a folding manner towards the axilla, and are inserted by a broad tendon into the os humeri, above the insertion of the deltoid muscle, and at the outer side of the groove which lodges the tendon of the long head of the biceps; some of its fibres likewise extend into that groove; and, from the lower part of this tendon, which is spread near two inches along the os humeri, we find it sending off other fibres, which help to form the fascia that covers the muscles of the arm. It often happens that that part of the pectoralis which arises from the clavicle, is separated from the inferior portion, so as to appear like a distinct muscle. This has induced Winslow to divide it into parts, one of which he calls the *clavicular*, and the other the *thoracic* portion. Sometimes these two portions are inserted by separate tendons, which cross one another at the upper and inner part of the os humeri, the tendon of the thoracic portion being inserted at the outer edge of the bicipital groove, immediately behind the other. This muscle, and the latissimus dorsi, form the cavity of the axilla, or arm-pit. The use of the pectoralis is to move the arm forwards, or to raise it obliquely towards the sternum. It likewise occasionally assists in moving the trunk upon the arm; thus, when we exert any efforts with the hand, as in raising ourselves from off an arm-chair, or in sealing a letter, the contraction of this muscle is particularly observable. To these uses Haller adds that of assisting in respiration, by raising the sternum and ribs. He tells us he well remembers, that when this muscle was affected by rheumatism, his breathing was incommoded: and that, when troubled with difficulty of respiration, he had often found himself greatly relieved by raising and drawing back his shoulders, keeping his arms at the same time firmly fixed. Winslow, however, has denied this use, and Albinus has omitted it, probably because it does not take place in a natural state.

PECTORA′LIS MI′NOR. *Serratus anticus*, of Albinus. Douglas and Cowper call this muscle *Serratus minor anticus*, and Winslow gives it the name of *Pectoralis minor*, and Dumas calls it *Costo-coracoidien*. It is a fleshy and pretty considerable muscle, situated at the anterior and lateral part of the thorax, immediately under the pectoralis major. It arises from the upper edges of the third, fourth, and fifth ribs, near where they join with their cartilages by an equal number of tendinous and fleshy digitations, which have been compared to the teeth of a saw, whence this and some other muscles, from their having a similar origin, or insertion, have gotten the name of *serrati*. From these origins it becomes thicker and narrower as it ascends, and is inserted by a flat tendon into the upper part of the coracoid process of the scapula. The principal use of this muscle is to draw the scapula forwards and downwards; and when that is fixed, it may likewise serve to elevate the ribs.

PECTORALS. (*Medicamenta pectoralia*; from *pectus*, the breast.) Medicines that relieve disorders of the chest.

PE′CTUS. (-oris, *neut.*) The breast. See *Thorax*.

Pectu′sculum. (Dim. of *pectus*, the breast; so named from its shape.) The metatarsus.

PE′DES HIPPOCA′MPI. (*Pes*, a foot, so named from their resemblance to the feet of the *hippocampus*, or sea-horse.) Two columns at the end of the fornix of the brain, which diverge posteriorly.

Pede′thmus. (From πηδαω, to leap.) The motion which is sensible in the arteries from the impulse of the blood. The pulse.

Pedia′smus. (From πεδιον, a field.) An epithet of a species of wild myrrh.

PEDICULA′RIA. (From *pediculus*, a louse; so called from its use in destroying lice.) The herb staves-acre. See *Delphinium Staphisagria*.

Pedicula′tio. *Morbus pedicularis*, φθειριασις. That disease of the body in which lice are continually bred on the skin.

Pedi′culus. (Dim. of *pes*, a foot.) 1. A louse, so named from its many small feet.

2. A pedicle or foot-stalk of a flower, or leaf.

Pedicus. See *Extensor brevis digitorum pedis.*

PEDILU′VIUM. (From *pedes*, the feet, and *lavo*, to wash.) A bath for the feet.

Pe′dion. (From ϖους, the foot.) The sole of the foot.

Pe′dora. (From *pes*, a foot.) The sordes of the eyes, ears, and feet.

Peganelæ′um. (From ϖηγανον, rue, and ελαιον, oil.) Oil of rue.

Pegane′rum. (From ϖηγανον, rue.) A plaster composed of rue.

Pe′ganum. (From ϖηγνυω, to compress; so called because, by its dryness, it condenses the seed.) Rue.

Pe′ge. (Πηγη, a fountain.) The internal angles of the eyes are called *Pegæ*.

Pe′lada. A species of baldness, a shedding of the hair from a venereal cause.

PELA′GRA. The disease called the *pelagra* does not appear to have been noticed by any of our nosologists. Indeed, few accounts of it have hitherto been published, although the peculiar symptoms with which it is attended, and the fatal consequences which generally ensue from it, render it equally curious and important. In certain districts, as Milan and Padua, in Italy, where it is peculiarly prevalent, it is computed to attack five inhabitants out of every hundred. The following account of this singular disease is extracted from Dr. Jansen's treatise on the subject, who had seen the disease at Milan:

About the month of March or April, when the season invites the farmers to cultivate their fields, it often happens that a shining red spot suddenly arises on the back of the hand, resembling the common erysipelas, but without much itching or pain, or indeed any other particular inconvenience. Both men and women, girls and boys, are equally subject to it. Sometimes this spot affects both hands, without appearing on any other part of the body. Not uncommonly it arises also on the shins, sometimes on the neck, and now and then, though very rarely, on the face. It is sometimes also seen on the breasts of women, where they are not covered by the clothes, but such parts of the body as are not exposed to the air, are very seldom affected; nor has it ever been observed to attack the palm of the hand, or the sole of the foot. This red spot elevates the skin a little, producing numerous small tubercles of different colours; the skin becomes dry and cracks, and the epidermis sometimes assumes a fibrous appearance. At length it falls off in white furfuraceous scales; but the shining redness underneath still continues, and, in some instances, remains through the following winter. In the mean time, excepting this mere local affection, the health is not the least impaired, the patient performs all his rural labours as before, enjoys a good appetite, eats heartily, and digests well. The bowels are generally relaxed at the very commencement of the disease, and continue so throughout its whole course. All the other excretions are as usual; and, in females, the menses return at their accustomed periods, and in the proper quantity. But what is most surprising is, that in the month of September, when the heat of the summer is over, in some cases sooner, in others later, the disorder generally altogether disappears, and the skin resumes its natural healthy appearance. This change has been known to take place as early as the latter end of May or June, when the disease has only been in its earliest stage. The patients, however, are not now to be considered as well; the disease hides itself, but is not eradicated: for, no sooner does the following spring return, but it quickly reappears, and generally is accompanied with severer symptoms. The spot grows larger, the skin becomes more unequal and hard, with deeper cracks. The patient now begins to feel uneasiness in the head, becomes fearful, dull, less capable of labour, and much wearied with his usual exertions. He is exceedingly affected with the changes of the atmosphere, and impatient both of cold and heat. Nevertheless he generally gets through his ordinary labour, with less vigour and cheerfulness indeed, than formerly, but still without being obliged to take to his bed; and, as he has no fever, his appetite continues good, and the chylopoietic viscera perform their proper functions. When the pelagra has even arrived at this stage, the returning winter, nevertheless, commonly restores the patient to apparent health; but the more severe the symptoms have been, and the deeper root the disease has taken, the more certainly does the return of spring produce it with additional violence. Sometimes the disease in the skin disappears, but the other symptoms remain notwithstanding. The powers both of the mind and body now become daily more enfeebled; peevishness, watchings, vertigo, and, at length, complete melancholy, supervene. Nor is there a more distressing kind of melancholy any where to be seen, than takes place in this disease. "On entering the hospital at Legnano," says Dr. Jansen, "I was astonished at the mournful spectacle I beheld, especially in the women's ward. There they all sat, indolent, languid, with downcast looks, their eyes expressing distress, weeping without cause, and scarcely returning an answer when spoken to; so that a person would suppose himself to be among fools and mad people: and, indeed, with very good reason; for gradually this melancholy increases, and at length ends in real mania.

"Many, as I had an opportunity of observing in this hospital, were covered with a peculiar and characteristic sweat, having a very offensive smell, which I know not how better to express than by comparing it to the smell of mouldy bread. A person accustomed to see the disease would at once recognize it by this single symptom. Many complained of a burning pain at night in the soles of the feet, which often deprived them of sleep. Some with double vision; others with fatuity; others with visceral obstructions; others with additional symptoms. Nevertheless, fever still keeps off, the appetite is unimpaired, and the secretions are regularly carried on. But the disease goes on increasing, the nerves are more debilitated, the legs and thighs lose the power of motion, stupor or delirium come on, and the melancholy terminates in confirmed mania. In the hospital at Legnano, I saw both men and women in this maniacal state. Some lay quiet; others were raving, and obliged to be tied down to the bed, to prevent them from doing mischief to themselves and others. In almost all these, the pulse was small, slow, and without any character of fever. One woman appeared to have a slight degree of furor uterinus; for, at the sight of men, she became merry, smiled, offered kisses, and by her gestures desired them to come towards her. Some were occupied in constant prayers; some pleased themselves with laughter, and others with other things. But it was remarkable, that all who were in this stage of the disease, had a strong propensity to drown themselves. They now begin to grow emaciated, and the delirium is often followed by a species of tabes. A colliquative diarrhœa comes on, which no remedy can stop, as also has been observed in nostalgia. Sometimes, in the pelagra, the diarrhœa comes on before the delirium, and the delirium and stupor mutually interchange with each other. The appetite often suddenly failed, so that the sick will sometimes go for near a week without tasting food. Not uncommonly it returns as suddenly, so that they eagerly devoured whatever was offered them, and this even at times when they are horridly convulsed. The convulsions with which they are attacked, are most shocking to see, and are of almost every kind, catalepsy excepted, which has been described by writers. I saw one girl in bed, who was violently distorted by opisthotonos every time she attempted to rise. Some are seized with emprosthotonos; and others with other species of tetanus. At length, syncope and death close the tragedy, often without any symptom of fever occurring through the whole course of the disease. The first stage of the pelagra, in which the local affection only takes place, Dr. Jansen observes, continues in some instances for a great length of time; persons being occasionally met with in whom it has lasted six or eight, or even fifteen years, disappearing regularly every winter, and returning again in the spring. This occasions some of the inhabitants to pay little attention to it; although, in other cases, it reaches its greatest height after the second or third attack. It appears that this disease is not infectious, and that the causes producing it are yet unascertained. It has been supposed, by some, to arise from the heat of the sun's rays; and hence it is now and then called *mal de sole;* but this does not produce any similar disease in other parts of the world, where it is in an equal or even much greater degree than at Milan; no disease in any respect resembling it, having hitherto been noticed in such regions, except the lepra asturiensis described by Thiery, and after him by Sauvages. In this, a tremor of the head and trunk of the body takes place, which does not happen in the pelagra. This, however, is the principal difference in the two diseases.

Pela′rium. (From ϖηλος, mud; so called from its muddy consistence.) A collyrium.

Peleca′nus. (From ϖελεκαω, to perforate.)

1. The pelican.

2. An instrument to draw teeth: so named from its curvature at the end resembling the beak of a pelican

Peleci′num. (From ϖελεκυς, a hatchet, so called because its seeds are shaped like a two-edged hatchet.) The hatchet-vetch.

Pelio′ma. (From ϖελος, black.) An ecchymosis when of a livid colour.

Pellitory, bastard. See *Achillea ptarmica.*

Pellitory of Spain. See *Anthemis pyrethrum.*

Pellitory, wall. See *Parietaria.*

Pe′lma. (From ϖελω, to move forwards.) The sole of the foot, or a sock adapted to the sole of the foot.

Pelta′lis cartila′go. (From *pelta*, a buckler; so called from its shape.) The scutiform cartilage of the larynx.

PELVIC LIGAMENTS. The articulation of the os sacrum with the last lumbar vertebra, and with the ossa innominata, is strengthened by means of a strong transverse ligament, which passes from the extremity and lower edge of the last lumbar vertebra, to the posterior and internal surface of the spine of the ilium. Other ligaments are extended posteriorly from the os sacrum to the ossa ilia on each side, and, from the direction of their fibres, may be called the lateral ligaments. Besides these, there are many shorter ligamentous fibres, which are seen stretched from the whole circumference of the articulating surfaces of these two bones. But the most remarkable ligaments of the pelvis are the two *sacro-ischiatic* ligaments, which are placed towards the posterior and inferior part of the pelvis. One of these may be called the greater, and the other the lesser sacro-ischiatic ligament. The first of these is attached to the posterior edge of the os sacrum, to the tuberosity of the ilium, and to the first of the three divisions of the os coccygis. Its other extremity is inserted into the inner surface of the tuberosity of the ischium. At its upper part it is of considerable breadth, after which it becomes narrower, but expands again before its insertion into the ischium, and extending along the tuberosity of that bone to the lower branch of the os pubis, where it terminates in a point, forms a kind of falx, one end of which is loose, while the other is fixed to the bone. The lesser sacro-ischiatic ligament is somewhat thicker than the former, and is placed obliquely before it. It extends from the transverse processes of the os sacrum, and the tuberosity of the spine of the ilium, on each side, to the spine of the ischium. These two ligaments not only serve to strengthen the articulation of the ossa innominata with the os sacrum, but to support the weight of the viscera contained in the pelvis, the back and lower part of which is closed by these ligaments. The posterior and external surface of the greater ligament likewise serves for the attachment of some portions of the gluteus maximus and gemini muscles. The symphysis pubis is strengthened internally by a transverse ligament, some of the fibres of which are extended to the obturator ligament.

PE′LVIS. (From πελυς, a basin, because it is shaped like a basin used in former times.) The cavity below the belly. The pelvis consists, in the child, of many pieces, but, in the adult, it is formed of four bones, of the os sacrum behind, the ossa innominata on either side, and the os coccygis below. See *Sacrum*, *Innominatum Os*, and *Coccygis Os*. It is wide and expanded at its upper part, and contracted at its inferior aperture. The upper part of the pelvis, properly so called, is bounded by an oval ring, which parts the cavity of the pelvis from the cavity of the abdomen. This circle is denominated the brim of the pelvis; it is formed by a continued and prominent line along the upper part of the sacrum, the middle of the ilium, and the upper part, or crest, of the os pubis. This circle of the brim supports the impregnated womb, keeps it up against the pressure of labour pains; and sometimes this line has been "as sharp as a paper-folder, and has cut across the segment of the womb;" and so, by separating the womb from the vagina, has rendered delivery impossible; and the child escaping into the abdomen the woman has died. The lower part of the pelvis is denominated the outlet. It is composed by the arch of the ossa pubis, and by the sciatic ligaments; it is wide and dilateable, to permit the delivery of the child; but being sometimes too wide, it permits the child's head to press so suddenly, and with such violence upon the soft parts, that the perineum is torn.

The marks of the female skeleton have been sought for in the skull, as in the continuation of the sagittal suture; but the truest marks are those which relate to that great function by which chiefly the sexes are distinguished; for while the male pelvis is large and strong, with a small cavity, narrow openings, and bones of greater strength, the female pelvis is very shallow and wide, with a large cavity and slender bones, and with every peculiarity which may conduce to the easy passage of the child.

The office of the pelvis is to give a steady bearing to the trunk, and to connect it with the lower extremities, by a sure and firm joining, to form the centre of all the great motions of the body, to contain the internal organs of generation, the urinary bladder, the rectum, and occasionally part of the small intestines, and to give support to the gravid uterus.

Pe′lvis au′rium. The cochlea in the ear.

Pe′lvis ce′rebri. The infundibulum in the brain.

Pemphigo′des. (From πεμφιξ, a blast of wind.) A fever distinguished by flatulencies and inflations, in which a sort of aërial vapour was said to pass through the skin.

PE′MPHIGUS. (From πεμφιξ, a bubble, or vesicle.) *Febris bullosa. Exanthemata serosa. Morta. Pemphigus helveticus. Pemphigus major. Pemphigus minor.* The vesicular fever. A fever attended by successive eruptions of vesicles about the size of almonds, which are filled with a yellowish serum, and in three or four days subside. The fever may be either synocha or typhus. It is a genus of disease in the Class *Pyrexiæ*, and Order *Exanthemata*, of Cullen. The latest writers on this disease contend, that it is sometimes acute and sometimes a chronic affection; that the former is constantly attended with fever, the latter is constantly without; that in neither case is it an acrimonious or contagious matter thrown out by the constitution, but pure serum, secreted by the cutaneous exhalant arteries. So rare was this disease when Dr. Cullen wrote, that he never saw it but once, in a case which was shown to him by Dr. Home. Dr. David Stuart, then physician to the hospital at Aberdeen, published an account of it in the Edinburgh Medical Commentaries. The patient was a private soldier of the seventy-third regiment, aged eighteen, formerly a pedlar, and naturally of a healthy constitution. About twenty days before he had been seized with the measles, when in the country; and, in marching to town, on the second day of their eruption, he was exposed to cold; upon which they suddenly disappeared. On his arrival at Aberdeen, he was quartered in a damp under-ground apartment. He then complained of sickness at stomach, great oppression about the præcordia, head-ache, lassitude, and weariness on the least exertion, with stiffness and rigidity of his knees and other joints. He had been purged, but with little benefit. About ten days before, he observed on the inside of his thighs, a number of very small, distinct, red spots, a little elevated above the surface of the skin, and much resembling the first appearance of the small-pox. This eruption gradually spread itself over his whole body, and the pustules continued every day to increase in size.

Upon being received into the hospital, he complained of head-ache, sickness at stomach, oppression about the præcordia, thirst, sore throat, with difficulty of swallowing;

his tongue was foul, his skin felt hot and feverish: pulse from 110 to 120, rather depressed; belly costive, eyes dull and languid, but without delirium. The whole surface of the skin was interspersed with vesicles, or phlyctænæ, of the size of an ordinary walnut; many of them were larger, especially on the arms and breast. In the interstices, between the vesicles, the appearance of the skin was natural, nor was there any redness round their base; the distance from one to another was from half an inch to a hand-breadth, or more. In some places two or three were joined together, like the pustules in the confluent small-pox. A few vesicles had burst of themselves, and formed a whitish scab, or crust. These were mostly on the neck and face; others showed a tolerable laudable pus. However, by far the greatest number were perfectly entire, turgid, and of a bluish colour. Upon opening them, it was evident that the cuticle elevated above the cutis, and distended with a thin, yellowish, semipellucid serum, formed this appearance. Nor was the surface of the cutis ulcerated, or livid; but of a red florid colour, as when the cuticle is separated by a blister, or superficial burning. No other person laboured under a similar disease, either in the part of the country from which he came, or where he resided, in Aberdeen.

Since the publication of this case of pemphigus, by Dr. Stuart, observations on this disease have been published by Dr. Dickson, of Dublin, by Mr. Gaitskell and Mr. Upton, in the Mem. of the Medical Society of London. Some subsequent observations on pemphigus were published in the London Med. Journal, by Mr. Thomas Christie. From a case which Mr. Christie describes, he is disposed to agree with Dr. Dickson, in thinking that sometimes, at least, pemphigus is not contagious. He remarks, however, that the pemphigus described by some foreign writers was extremely infectious; circumstances which, he thinks, may lead to a division of the disease into two species, the pemphigus simplex and complicatus, both of which, but especially the last, seem to vary much with respect to mildness and malignity.

PE′MPHIGUS MA′JOR. A title under which pemphigus is spoken of by Sauvages, who defines it an eruption of phlyctænæ, about the size of an hazel-nut, filled with a thin yellow serum.

PE′MPHIGUS MI′NOR. In this species the vesicles are no larger than garden-peas.

PE′MPHIS. A species of *Lythrum*.

PEMPTÆ′US. (From ϖεμπτος, the fifth.) An ague, the paroxysm of which returns every fifth day.

PENÆ′A. A species of *Polygala*.

PENÆ′A MUCRONA′TA. The systematic name of the plant which is said to afford the sarcocolla. This is brought from Persia and Arabia in small grains of a pale yellow colour, having also sometimes mixed with them a few of a deep red colour. Its taste is bitter, but followed with some degree of sweetness. It has been chiefly used for external purposes, and, as its name imports, has been thought to agglutinate wounds and ulcers; but this opinion now no longer exists.

PENETRA′NTIA. (From *penetro*, to pierce through.) Medicines which pass through the pores and stimulate.

PENNICILLIFORM. (*Penicilliformis*; from *penicillum*, a pencil, and *forma*, likeness.) Resembling a painter's pencil.

PENICI′LLUS. *Penicillum*. (Dim. of *peniculum*, a brush.) 1. A tent, or pledget.

2. The secreting extremities of the vena portæ are called *penicilli*. See *Liver*.

PENI′DIUM. A kind of clarified sugar, with a mixture of starch, made up into small rolls. The confectioners call it barley-sugar.

PENI′DIUM SACCHARA′TUM. See *Penidium*.

PE′NIS. (*A pendendo*, from its hanging down.) *Membrum virile*. The cylindrical part that hangs down, under the mons veneris, before the scrotum of males. It is divided by anatomists into the root, body, and head called the *glans penis*. It is composed of common integuments, two corpora cavernosa, and one corpus spongiosum, which surrounds a canal, the *urethra*, that proceeds from the bladder to the apex of the penis, where it opens by the *meatus urinarius*. See *Urethra*. The fold of the skin that covers the glans penis is termed the prepuce. The arteries of the penis are from the hypogastric and ischiatic. The vein of the penis, *vena magna ipsius penis*, empties itself into the hypogastric vein. The absorbents of this organ are very numerous, and run under the common integuments to the inguinal glands: absorbents also are found in great plenty in the urethra. The glands of the penis are, Cowper's glands, the prostate, muciparous, and odoriferous glands. The nerves of the penis are branches of the sacral and ischiatic.

PE′NIS CE′REBRI. The pineal gland.

PE′NIS ERE′CTOR. See *Erector penis*.

PE′NIS MULLIE′BRIS. See *Clitoris*.

Pennyroyal. See *Mentha pulegium*.

Pennyroyal, hart's. See *Mentha cervina*.

PENTADA′CTYLON. (From ϖεντε, five, and δακτυλος, a finger; so called, because it has five leaves upon each stalk, like the fingers upon the hand.) The herb cinquefoil; also a name for the ricinus, the fruit of which resembles a hand.

PENTAMY′RUM. (From ϖεντε, five, and μυρον, ointment.) An ointment composed of five ingredients.

PENTANEU′RON. (From ϖεντε five, and νευρον, a string; so called, because it has five-ribbed leaves.) Ribwort.

PENTAPHA′RMACON. (From πεντε five, and φαρμακον, *remedium*, remedy.) Any medicine consisting of five ingredients.

PENTAPHYLLOI′DES. (From ϖενταφυλλον, cinquefoil, and ειδος, likeness; so called from its resemblance to cinquefoil.) Barren strawberry.

PENTAPHY′LLUM. (From ϖεντε five, and φυλλον, a leaf; so named, because it has five leaves on each stalk.) See *Potentilla reptans.*

PENTAPLEU′RUM. The same as pentaneuron.

PENTA′TOMUM. (From ϖεντε, five, and τεμνω, to cut; so called because its leaves are divided into five segments.) Cinquefoil.

PENTO′ROBUS. (From ϖεντε, five, and ορυϐος, the wood-pea; so called because it has five seeds resembling the wood-pea.) The herb peony.

Peony, common. See *Pæonia.*

PEPA′NSIS. (From ϖεπαινω, to concoct.) *Pepasmus.* The maturation or concoction of humours.

PEPA′SMOS. The same as pepansis.

PEPA′STICA. (From ϖεπαινω, to concoct.) Digestive medicines.

PE′PITA NUX. Ignatius's bean.

PE′PLION. (From ϖεπλος, the herb devil's-milk; so called from its resemblance.) *Peplos.* Wild parsley.

PE′PO. (From ϖεπτω to ripen.) See *Cucurbita.*

Pepper, black. See *Piper nigrum.*

Pepper, Guinea. See *Capsicum.*

Pepper, Jamaica. See *Myrtus Pimenta.*

Pepper, long. See *Piper longum.*

Pepper, poorman's. See *Polygonum Hydropiper.*

Pepper, wall. See *Illecebra.*

Pepper, water. See *Polygonum Hydropiper.*

Pepper, white. See *Piper nigrum.*

Peppermint. See *Mentha piperita.*

Pepperwort. See *Lepidium.*

PE′PTICOS. (From ϖεπτω, to ripen.) Such a thing as promotes digestion, or is digestive.

PERACUTE. Very sharp. Diseases are thus called when greatly inflamed, or aggravated beyond measure.

PERCEPIER. Parsley-piert, or parsley-breakstone.

PERCIVAL, THOMAS, was born at Warrington in 1740. He studied for three years with great assiduity, at Edinburgh; then came to London, and was chosen a Fellow of the Royal Society; after which he visited different places on the Continent, and took his degree at Leyden. In 1767, he settled at Manchester, and continued there till the period of his death, in 1804, in the unremitting exercise of his medical duties. Dr. Percival possessed, in an eminent degree, those moral and intellectual endowments, which are calculated to form a distinguished physician. He has been well characterised as an author without vanity, a philosopher without pride, a scholar without pedantry, and a Christian without guile. His earlier enquiries were directed to medical, chemical, and philosophical subjects, which he pursued with great judgment, combining the cautious but assiduous use of experiment, with scientific observation, and much literary research. His papers were published collectively, under the title of "Essays, Medical and Experimental," in three volumes; which have passed through many editions, and obtained him considerable reputation. His subsequent publications were of a moral nature, and originally conceived for the improvement of his children. But his last work, entitled, "Medical Ethics," which appeared in 1803, is adapted for the use of the profession, and will form a lasting monument of his integrity and wisdom. He contributed also numerous papers on various subjects to the memoirs of the Literary and Philosophical Society of Manchester, which he had been mainly instrumental in establishing, and which did not cease to manifest its grateful sense of his merits, by the continued appointment of him to the presidency.

PERCOLATION. (*Percolatio*, straining through; from *per*, through, and *colo*, to strain.) It is generally applied to animal secretion, from the office of the glands being thought to resemble that of a strainer, in transmitting the liquors that pass through them.

PERDE′TUM. In Paracelsus it is the root of skirret.

Perennial worm-grass. See *Spigelia.*

PERETE′RION. (From ϖεραω, to dig through.) The perforating part of the trepan.

PERDI′CIUM. (From ϖερδιξ, a partridge; so called because partridges were said to feed upon it.) Pellitory of the wall.

PERFOLIA′TA. (From *per* and *folium*, so called because the leaves surround the stem, like those of a cabbage.) See *Bupleurum.*

PE′RFORANS. See *Flexor profundus perforans.*

PE′RFORANS, SEU FLE′XOR PROFU′NDUS. See *Flexor longus digitorum pedis profundus perforans.*

PE′RFORANS, SEU FLE′XOR TE′RTII INTERNO′DII DIGITO′RUM PE′DIS. See *Flexor longus digitorum pedis profundus perforans.*

PE′RFORANS, VU′LGO PROFU′NDUS. See *Flexor profundus perforans.*

PERFORA′TA. (From *perforo*, to pierce through; so called because its leaves are full of holes.) See *Hypericum.*

PERFORA′TUS. See *Flexor brevis digitorum pedis*, and *Flexor sublimis perforatus.*

Perfora′tus, seu fle′xor secu′ndi interno′dii digito′rum pe′dis. See *Flexor brevis digitorum pedis perforatus sublimis.*

Peria′mma. (From ϖεριαπτω, to hang round.) An amulet, or charm, which was hung round the neck to prevent infection.

PERIBLE′PSIS. (From ϖεριβλεπω, to stare about.) That kind of wild look which is observed in delirious persons.

Peri′bole. (From ϖεριβαλλω, to surround.) Sometimes it signifies the dress of a person; at others a translation of the morbific humours to the surface of the body.

PERIBRO′SIS. An ulceration, or erosion, at the corners or uniting parts of the eyelids. This disorder most frequently affects the internal commissure of the eyelids. The species are, 1. *Peribrosis,* from the acrimony of the tears, as may be observed in the epiphora. 2. *Peribrosis,* from an ægylops, which sometimes extends to the commissure of the eyelids.

PERICARDI′TIS. (From ϖερικαρδιον, the pericardium.) Inflammation of the pericardium. See *Carditis.*

PERICA′RDIUM. (From ϖερι, about, and καρδια, the heart.) The membranous bag that surrounds the heart. Its use is to secrete and contain the vapour of the pericardium, which lubricates the heart, and thus preserves it from concreting with the pericardium.

Perica′rpia. (From ϖερι, about, and *carpus,* the wrist.) Are medicines that are applied to the wrist.

Pericne′mia. (From ϖερι, about, and κνημη, the tibia.) The parts about the tibia.

PERICHO′NDRIUM. (From ϖερι, about, and χονδρος, a cartilage.) The membrane that covers a cartilage.

Perichri′sis. (From ϖερι, about, and χριω, to anoint.) A liniment.

Perichri′sta. (From περι, around, and χριω, to anoint.) Any medicines with which the eyelids are anointed, in an ophthalmia.

Pericla′sis. (From ϖερι, about, and κλαω, to break.) It is a term used by Galen for such a fracture of the bone as quite divides it, and forces it through the flesh into sight. Or a fracture with a great wound, wherein the bone is laid bare.

Pericly′menum. (From ϖερικλυζω, to roll round; so called because it twists itself round whatever is near it.) The honeysuckle, or woodbine.

PERICRA′NIUM. (From ϖερι, about, and κρανιον, the cranium.) The membrane that is closely connected to the bones of the head.

Peride′smica. (From ϖερι, about, and δεσμος, a ligature.) Applied to an ischuria, or suppression of urine, from stricture in the urethra.

Peri′dromos. (From ϖερι, about, and δρομος, a course.) The extreme circumference of the hairs of the head.

Perie′rgia. Περιεργια. Is any needless caution or trouble in an operation, as ϖεριεργος is one who dispatches it with unnecessary circumstances: both the terms are met with in Hippocrates, and others of the Greek writers.

Perieste′cos. (From ϖεριϛημι, to surround, or to guard.) An epithet for diseases, signs, or symptoms, importing their being salutary, and that they prognosticate the recovery of the patient.

Peri′graphe. (From ϖεριγραφω, to circumscribe.) An inaccurate description, or delineation. In Vesalius, *perigraphe* signifies certain white lines and impressions, observable in the musculus rectus of the abdomen.

Pe′rin. (From ϖηρα, a bag.) A testicle. Some explain it the *Perinæum;* others say it is the *Anus.*

Perinæoce′le. (From ϖεριναιον, the perinæum, and κηλη, a rupture.) A rupture in the perinæum.

PERINÆ′UM. (From ϖερινεω, to flow round, because that part is generally moist.) The space between the anus and organs of generation.

Perinæ′us transve′rsus. See *Transversus perinæi.*

Periny′ctides. (From ϖερι, and νυξ, the night.) Little swellings like nipples; or, as others relate, pustules, or pimples, which break out in the night.

PERIO′STEUM. (From ϖερι, about, and οϛεον, a bone.) The membrane which invests the external surface of all the bones, except the crowns of the teeth. It is of a fibrous texture, and well supplied with arteries, veins, nerves, and absorbents. It is called *pericranium,* on the cranium; *periorbita,* on the orbits; *perichondrium,* when it covers cartilage; and *peridesmium,* when it covers ligament. Its use appears to be to distribute the vessels on the external surfaces of bones.

Periphimo′sis. See *Phimosis.*

Peripleumo′nia. See *Pneumonia.*

PERIPNEUMO′NIA. (From ϖερι, and ϖνευμων, the lung.) Peripneumony, or inflammation of the lungs. See *Pneumonia.*

PERIPNEUMO′NIA NO′THA. Bastard or spurious peripneumony. Practitioners, it would appear, do not all affix this name to the same disease; some affirming it to be a rheumatic affection of the respiratory muscles, while others consider it as a mild peripneumony. It is characterised by difficulty of breathing, great oppression at the chest, with obscure pains, coughs, and occasionally an expectoration. Spurious peripneumony is sometimes so slight as to resemble only a violent catarrh; and, after the employment of a few proper remedies, goes off by a free and copious expectoration; but sometimes the symptoms run high, and an effusion of serum into the bronchia takes place, which destroys the patient.

Peripye′ma. (From ϖερι, about, and ϖυον, pus.) It is a collection of matter about any part, as round a tooth in the gums.

Perirrhe′xis. (From ϖερι, about, and ρηγνυμι, to break.) A breaking off, or a separation round about, either of corrupted bones or of dead flesh.

Perirrhœ′a. (From περιρρεω, to flow about.) It is a reflux of humours from the habit of the body into any of the larger emunctories for its excretion, as in an hydropsical case, of water upon the bowels or kidneys, where it passes away by urine, or stool.

Periscyphi′smus. (From ϖερι, about, and κυφος, gibbous.) An incision made across the fore-head, or from one temple to another, over the upper part of the os frontis, over the coronary suture. It was formerly used when a considerable inflammation or defluxion in the eyes attended.

PERISTALTIC MOTION. (*Peristalticus;* from ϖεριϛελλω, to contract.) The vermicular motion of the intestines, by which they contract and propel their contents. A similar motion takes place in the Fallopian tubes, after conception, by means of which the ovum is translated from the ovarium into the uterus.

Peristaphyli′nus. (From ϖερι, about, and ϛαφυλη, the uvula.) A muscle which is connected with the staphylinus.

Periste′rium. (From ϖεριϛερος, a pigeon; so called because pigeons covet it.) The herb vervain: See *Verbena.*

Peristro′ma. (From ϖεριϛορεννυω, to strew about.) *Peristroma* properly signifies any covering, and probably in place of this, the term *Peristoma* is applied, by Pecquet, to the mucous or villous coat or lining of the intestines, the same which Bilsius calls *Muscum Villosum;* Bartholine, *Crusta Membranosa;* and De Graaf, *Crusta Vermicularis.*

Perisy′stole. (From ϖεριϛελλω, to compress.) 1. The time between a contraction and dilatation of the heart.

2. A pause, or intermission between the systole and diastole, which is by most denied to be perceived in healthy persons, but when dying it is very sensibly felt.

Perite′rion. (From ϖερι, and τηρεω, to preserve.) The perforating part of the trepan.

Peritonæore′xis. (From περιτοναιον, the peritonæum, and ρησσω, to break.) A bursting of the peritonæum, and consequent hernia.

PERITONÆ′UM. (From ϖεριτεινω, to extend round.) A strong simple membrane, by which all the viscera of the abdomen are surrounded. It has an exceedingly smooth, exhaling, and moist internal surface. Outwardly, it is every where surrounded by cellular substance, which, towards the kidneys, is very loose and very fat; but is very short at the lower tendon of the transverse muscles. It begins from the diaphragm, which it completely lines; and, at the last fleshy fibres of the ribs, and the external lumbar fibres, it completes the septum, in conjunction with the pleura, with which it is continuous through the various intervals of the diaphragm. Posteriorly, it descends before the kidneys; anteriorly, behind the abdominal muscles; it dips into the pelvis from the bones of the pubes, passes over the bladder, and descends behind; and being again carried backwards, at the entrance of the ureters, in two lunar folds, it rejoins upon the intestinum rectum, that part of itself which invests the loins, and in this situation lies before the rectum. The cellular texture, which covers the peritonæum on the outside, is continued into sheaths in very many places; of which, one receives the testicle on each side, another the iliac vessels of the pelvis, viz. the obturatoria, those of the penis and bladder, and the aorta, and, ascending to the breast, accompanies the œsophagus and vertebræ; by means of which, there is a communication between the whole body and the peritonæum, well known in dropsical people. It has various prolongations for covering the viscera. The shorter productions of this membrane are called ligaments; and are formed by a continuous reduplication of the peritonæum, receding from its inner surface, enclosing cellular substance, and extending to some viscus, where its plates separate, and, having diverged, embrace the viscus; but the intermediate cellular substance always accompanies this membranaceous coat, and joins it with the true substance of the viscus. Of this short kind of production, three belong to the liver, one or two to the spleen, and others to the kidneys, and to the sides of the uterus and vagina. By these means, the tender substance of the viscera is defended from injury by any motion or concussion, and their whole mass is prevented from being misplaced by their own weight, and from injuring themselves, being securely connected with the firm sides of the peritonæum.

PERITONI′TIS. (From ϖεριτοναιον, the peritonæum.) An inflammation of the peritonæum. A genus of disease in the Class *Pyrexiæ,* and Order *Phlegmasiæ,* of Cullen, known by the presence of pyrexia, with pain in the abdomen, that is increased when in an erect position, but without other proper signs of inflammation of the abdominal viscera. When the inflammation attacks the peritonæum of the viscera, it takes the name of the viscus: thus, *peritonitis, hepatis, peritonitis intestinalis, peritonitis omentalis,* or *epiploitis,* or *omentitis, peritonitis mesenterii, &c.*

All these Dr. Cullen considers under the general head of peritonitis, as there are no certain signs by which they can be distinguished from each other, and the method of cure must be the same in all. He however distinguishes three species.

1. *Peritonitis propria;* when the peritoneum, strictly so called, is inflamed.

2. *Peritonitis omentalis. Omentitis. Epiploitis,* when the omentum is affected.

3. *Peritonitis mesenterica,* when the mesentery is inflamed.

Perizo′ma. (From περιζωννυμι, to gird round.) This term strictly signifies a girdle; but by Hildanus, and some other chirurgical writers, it is applied to those instruments for supporting ruptures, which we commonly call trusses. Some also express by it the diaphragm.

Pe′rla. (Ital. and Span. *perl,* Welch, *perlen,* Germ.) See *Margarita.*

PE′RNIO. A kibe or chilblain. A species of *erythema,* of Cullen. Chilblains are painful inflammatory swellings, of a deep purple or leaden colour, to which the fingers, toes, heels, and other extreme parts of the body are subject on being exposed to a severe degree of cold. The pain is not constant, but rather pungent and shooting at particular times, and an insupportable itching attends. In some instances the skin remains entire, but in others it breaks and discharges a thin fluid. When the degree of cold has been very great, or the application long continued, the parts affected are apt to mortify and slough off, leaving a foul ill-conditioned ulcer behind. Children and old people are more apt to be troubled with chilblains than those of a middle age; and such as are of a scrophulous habit, are remarked to suffer severely from them.

Perone′us anti′cus. See *Peroneus brevis.*

PERONE′US BRE′VIS. (*Peroneus,* sc. *musculus,* περοναιος, from *perone,* the fibula.) This muscle is the *peroneus secundus* seu *anticus,* of Douglas, the *peroneus medius* seu *anticus,* of Winslow, the *peronæus secundus,* of Cowper, and *petit-peroneo sus-metatarsien,* of Dumas. It arises by an acute, thin, and fleshy origin from the anterior and outer part of the fibula, its fibres continuing to adhere to the lower half of that bone. Its round tendon passes through the groove in the malleolus externus, along with that of the peroneus longus, after which it runs in a separate groove to be inserted into the upper and posterior part of the tubercle at the basis of the metatarsal bone that supports the little toe. Its use is to assist the peroneus longus.

PERONE′US LO′NGUS. This muscle, which is the *peroneus primus* seu *posticus,* of Douglas, *peroneus maximus* seu *posterior,* of Winslow, *peronæus primus,* of Cowper, and *tibi-peroneo-tarsien,* of Dumas, is situated somewhat anteriorly along the outer side of the leg. It arises tendinous and fleshy from the external lateral part of the head of the tibia, and likewise from the upper anterior surface and outer side of the *perone* or fibula, its fibres continuing to adhere to the outer surface of the latter to within three or four inches of the malleolus externus. It terminates in a long round tendon, which runs obliquely behind the malleolus internus, where it passes through a cartilaginous groove in common with the peroneus brevis, being bound down by an annular ligament. When it has reached the os calcis, it quits the tendon of the peroneus brevis, and runs obliquely inwards along a groove in the os cuboides, under the muscles on the sole of the foot, to be inserted into the outside of the posterior extremity of the metatarsal bone, that supports the great toe. Near the insertion of this muscle we find a small *bursa mucosa.* This muscle draws the foot outwards, and likewise assists in extending it.

Perone′us ma′ximus. See *Peroneus longus.*

Perone′us me′dius. See *Peroneus brevis.*

Perone′us posti′cus. See *Peroneus longus.*

Perone′us pri′mus. See *Peroneus longus.*

Perone′us secu′ndus. See *Peroneus brevis.*

PERONE′US TE′RTIUS. This is the name given by Albinus to a muscle which, by some writers, is called *nonus Vesalii,* or Vesalius's ninth muscle of the foot; but by most considered in the present day as a portion of the extensor longus digitorum pedis. It is situated at the anterior, inferior, and outer part of the leg, along the outer edge of the last-described muscle, to which it is intimately united. It arises fleshy from the anterior surface of the lower half of the fibula, and from the adjacent part of the interosseous ligament. Its fibres run obliquely downwards, towards a tendon which passes under the annular ligament, and then running obliquely outwards, it is inserted into the root of the metatarsal bone that supports the little toe. This muscle assists in bending the foot.

Pe′rone. (From πειρω, to fasten; so called because it fastens together the tibia and the muscles.) The fibula.

PE′RSICA. (From *Persia,* its native soil.) The peach. See *Amygdalus.*

Persica′ria. (From *Persica,* the peach-tree, so called because its blossoms are like those of the peach.) See *Polygonum Persicaria.*

Persica′ria mi′tis. See *Polygonum Persicaria.*

Persica′ria u′rens. See *Polygonum hydropiper.*

Pe′rsicus i′gnis. A carbuncle. Avicenna says, it is that species of carbuncle which is attended with pustules and vesications.

Persi'stens fe'bris. A regular intermitting fever, the paroxysms of which return at constant and stated hours.

Persona'ta. (From *persona*, a mask, because, according to Pliny, the antient actors used to mask themselves with the leaves of this plant.) See *Arctium lappa.*

PERSPIRATION. *Perspiratio.* The vapour that is secreted by the extremities of the cutaneous arteries from the external surface of the body. It is distinguished into *sensible* and *insensible*. The former is separated in the form of an invisible vapour, the latter so as to be visible in the form of very little drops adhering to the epidermis. The *secretory organ* is composed of the extremities of the cutaneous arteries. The *smell* of the perspirable fluid, in an healthy man, is fatuous and animal; its *taste* manifestly salt and ammoniacal. In *consistence* it is vaporous or aqueous; and its *specific gravity* in the latter state is greater than that of water. For the most part it is yellowish, from the passage of the subcutaneous oil, and sebaceous matter of the subcutaneous glands. Sometimes it is reddish, from the globules of the cruor passing through, especially under the axillæ. The *quantity* is sometimes so profuse, as not only conspicuously to moisten the linen, but also the thicker garments.

The *constituent principles* of the perspirable fluid appear to be. 1. *Water*, attenuated into vapour, by the matter of heat. 2. *Animal gas*, or carburetted hydrogen; as the production of carbonic acid gas with the oxygen of the atmosphere shews. 3. *Azotic gas.* For water, in which a man has bathed, soon becomes putrid. Carburetted hydrogen, chemically combined with azote, would appear to constitute *putrid miasma.* May not this be the origin of putrid fever, in those narrow confined chambers in which there are many persons? 4. The *glandular smegma* and *subcutaneous oil;* hence linen is stained with a yellowish colour, and leanness is brought on, when perspiration is profuse. 5. The *serum of the blood.* This affords an immense quantity of water, and the albuminous and saline part of the sweat. It makes the linen of a viscid rigidity, and of a salt taste. Glass-blowers sometimes excrete so acrid a sweat, that salt has been seen collected in crystals on their faces.

Perspiration varies in respect to, 1. The *temperature of the atmosphere.* Thus men have a more copious, viscid, and higher-coloured sweat in summer than in winter, and in warm countries, than in colder regions. 2. *Sex.* The sweat of a man is said to smell more acrid than that of a woman. 3. *Age.* The young are more subject to sweat than the aged, who, during the excessive heat of the summer scarcely sweat at all. 4. *Ingesta.* An alliacious sweat is perceived from eating garlick; a leguminous from peas; an acid from acids; a fetid from animal food only; and a rancid sweat from fat foods, as is observed in Greenland. A long abstinence from drink causes a more acrid and coloured sweat; and the drinking a great quantity of cold water in summer, a limpid and thin sweat. 5. *Medicines.* The sweat of those who have taken musk, even moderately, and assafœtida, or sulphur, smells of their respective natures. 6. *Region of the body.* The sweat of the head is greasy; on the forehead it is more aqueous; under the axillæ very unguinous; and in the interstices of the toes, it is very fetid, forming, in the most healthy man blackish sordes. 7. *Diseases.* In this respect it varies very much, in regard to quantity, smell, and colour; for the sweat of gouty persons is said to turn blue vegetable juices to a red colour. Some men also have a lucid sweat, others a sweat tinging their linen of a cærulean colour.

The uses of the insensible perspiration are, 1. To *liberate* the blood from superfluous animal gas, azote, and water. 2. To eliminate the noxious and heterogeneous excrements; hence the acid, rancid, leguminous, or putrid perspiration of some men. 3. To *moisten* the external surface of the body, lest the epidermis cutis, and its nervous papillæ be dried up by the atmospheric air. 4. To *counter-balance* the suppressed pulmonary transpiration of the lungs; for when it is suppressed, the cutaneous is increased; hence the nature of both appears to be the same.

The use of the sensible perspiration, or sweat, in an healthy man, is scarcely observable, unless from an error of the non-naturals. Its first effect on the body is always prejudicial, by exhausting and drying it; although it is sometimes of advantage. 1. By supplying a watery excretion: thus when the urine is deficient, the sweat is often more abundant. In this manner an aqueous diarrhœa is frequently cured by sweating. 2. By eliminating, at the same time, any morbid matter. Thus various miasmata are critically expelled, in acute and chronic diseases, with the sweat.

PERTU'SSIS (From *per*, much, and *tussis*, cough.) The hooping-cough. A genus of disease in the Class *Neuroses*, and Order *Spasmi*, of Cullen, known by a convulsive strangulating cough, with hooping, returning by fits, that are usually terminated by a vomiting, and being contagious.

Children are most commonly the subjects of this disease, and it seems to depend on a specific contagion, which affects them but once in their life. The disease being once produced, the fits of coughing are often repeated without any evident cause; but in many cases, the contagion may be considered as only giving the predisposition, and the frequency of the fits may depend upon various exciting causes, such as violent exercise, a full meal, the having taken food of difficult digestion, and irritation of the lungs by dust, smoke, or disagreeable odours. Emotions of the mind may likewise prove an exciting cause.

Its proximate or immediate cause seems to be a viscid matter or phlegm lodged about the bronchia, trachea, and fauces, which sticks so close as to be expectorated with the greatest difficulty. Some have supposed it to be a morbid irritability of the stomach, with increased action of its mucous glands; but the affection of the stomach which takes place in the disease, is clearly only of a secondary nature, so that this opinion must be erroneous.

The hooping-cough usually comes on with a difficulty of breathing, some degree of thirst, a quick pulse, and other slight febrile symptoms, which are succeeded by a hoarseness, cough, and difficulty of expectoration. These symptoms continue perhaps for a fortnight or more, at the end of which time the disease puts on its peculiar and characteristic form, and is now evident, as the cough becomes convulsive, and is attended with a peculiar sound, which has been called a hoop.

When the sonorous inspiration has happened, the coughing is again renewed, and continues in the same manner as before, till either a quantity of mucus is thrown up from the lungs, or the contents of the stomach are evacuated by vomiting. The fit is then terminated, and the patient remains free from any other for some time, and shortly afterwards returns to the amusements he was employed in before the accession of the fit, expresses a desire for food, and when it is given to him, takes it greedily. In those cases, however, where the attack has been severe, he often seems much fatigued, makes quick inspirations, and falls into a faint.

On the first coming on of the disease, there is little or no expectoration, or if any, it consists only of thin mucus, and as long as this is the case the fits of coughing are frequent, and of considerable duration; but on the expectoration becoming free and copious, the fits of coughing are less frequent, as well as of shorter duration.

By the violence of coughing, the free transmission of blood through the lungs is somewhat interrupted, as likewise the free return of the blood from the head, which produces that turgescence and suffusion of the face, which commonly attend the attack, and in some instances brings on a hæmorrhage either from the nose or ears.

The disease having arrived at its height, usually continues for some weeks longer, and at length goes off gradually. In some cases it is, however, protracted for several months, or even a year.

Although the hooping-cough often proves tedious, and is liable to return with violence on any fresh exposure to cold, when not entirely removed, it nevertheless is seldom fatal, except to very young children, who are always likely to suffer more from it than those of a more advanced age. The danger seems indeed always to be in proportion to the youth of the person, and the degree of fever, and difficulty of breathing, which accompany the disease, as likewise the state of debility which prevails.

It has been known in some instances to terminate in apoplexy and suffocation. If the fits are put an end to by vomiting, it may be regarded as a favourable symptom, as may likewise the taking place of a moderate and free expectoration, or the ensuing of a slight hæmorrhage from the nose or ears.

Dissections of those who die of the hooping-cough usually show the consequence of the organs of respiration being affected, and particularly those parts which are the seat of catarrh. When the disease has been long protracted, it is apt to degenerate into pulmonary consumption, asthma, or visceral obstructions, in which last case the glands of the mesentery are found in a hard and enlarged state.

In the treatment of this disease it must be borne in mind, that in the early period palliative measures can only be employed; but when it continues merely from habit, a variety of means will often at once put a stop to it. In the first stage in mild cases very little is required, except obviating occasional irritation, keeping the bowels regular, &c. But where it puts on a more serious character, the plan will differ accordingly as it is attended with inflammatory symptoms, or exhibits a purely spasmodic form. In the former case, it may be sometimes proper in plethoric habits to begin by a full bleeding, or leeches to the chest, if the patient be very young, then clear the bowels effectually, apply a blister, and exhibit antimonials, or squill, in nauseating doses, assisted perhaps by opium, to promote diaphoresis and expectoration. An occasional emetic, where the breathing is much oppressed with wheezing, in young children particularly, may afford material relief. When the disorder is more of the spasmodic character, some of these means may still be useful, as blisters, and nauseating medicines, so far as the strength will admit; but the remedies of greatest efficacy are the narcotics, as opium, conium, &c. exhibited in adequate doses. In the chronic or habitual stage of the disease, almost any thing, which produces a considerable impression on the constitution, will occasionally succeed: but we chiefly rely on sedative and antispasmodic, or on tonic remedies, accordingly as there are marks of irritability, or of mere debility in the system. Of the former description opium is perhaps the best, especially in conjunction with squill, given in a full dose at night, and in small quantities swallowed slowly from time to time during the day. Conium, assafœtida, &c. may however occasionally answer better in particular constitutions. Among the tonics the cinchona is often highly efficacious, where no appearances of local disease attend: some of the metallic preparations also, particularly sulphate of zinc, may be much relied upon. Sometimes stimulant applications to the chest, but still more certainly opiate frictions, will be found to cure this disorder. The same is very often accomplished by a change of air, indeed occasionally after the failure of most remedies. The cold bath also, where there is no local disease, may have an excellent effect; assisted by warm clothing, especially wearing some kind of fur over the chest. Fear and other emotions of the mind, strangury induced by the use of the lytta, &c. &c. rank also among the remedies of pertussis.

Peruvian balsam. See *Myroxylon peruiferum.*

Peruvian bark. See *Cinchona.*

Peruvia′nus co′rtex. See *Cinchona.*

Peruvia′nus co′rtex fla′vus. See *Cinchona.*

Peruvia′nus co′rtex ru′ber. See *Cinchona.*

PERVIGI′LIUM. (From *per*, much, and *vigilo*, to watch.) Watching, or a want of sleep. See *Vigilance.*

Pervi′nca. (From *pervincio*, to tie together.) So called because its stringy roots were used for binding substances together. The herb periwinkle.

Pes Alexandri′nus. See *Anthemis pyrethrum.*

Pes ca′præ. Goat's foot, a species of *Oxalis;* also a species of *Convolvulus.*

Pes ca′ti. See *Gnaphalium.*

Pes columbi′nus. See *Geranium rotundifolium.*

Pes leo′nis. The ladies mantle is sometimes so called. See *Alchemilla.*

Pes ti′gridis. Tiger's foot. A species of *Ipomœa.*

PESSARY. (*Pesarium*, from ϖεσσω, to soften.) An instrument that is introduced into the vagina to support the uterus.

Pestilentwort. See *Tussilago petasites.*

PE′STIS. The plague. A genus of disease in the Class *Pyrexiæ*, and Order *Exanthemata*, of Cullen, characterized by typhus, which is contagious in the extreme, prostration of strength, buboes, and carbuncles, petechiæ, hæmorrhage, and colliquative diarrhœa.

By some writers the disease has been divided into three species; that attended with buboes; that attended with carbuncles; and that accompanied with petechiæ. This division appears wholly superfluous. Dr. Russel, in his elaborate treatise on the plague, makes mention of many varieties; but when these have arisen, they seem to have depended in a great measure on the temperament and constitution of the air at the time the disease became epidemical, as likewise on the patient's habit of body at the time of his being attacked with it.

The plague is by most writers considered as the consequence of a pestilential contagion, which is propagated from one person to another by association, or by coming near infected materials.

It has been observed that it generally appears as early as the fourth or fifth day after infection: but it has not yet been ascertained how long a person who has laboured under the disease is capable of infecting others, nor how long the contagion may lurk in an unfavourable habit without producing the disease, and may yet be communicated, and the disease excited, in habits more susceptible of the infection. It has generally been supposed, however, that a quarantine of 40 days is much longer than is necessary for persons, and probably for goods also. Experience has not yet determined how much of this term may be abated. "If I am not much mistaken," observes Dr. Thomas, "the Board of Trade has, however, very lately, under the sanction of the College of Physicians, somewhat abridged it."

It sometimes happens that after the application of the putrid vapour, the patient experiences only a considerable degree of languor and slight head-ache for many days previous to a perfect attack of the disease: but it more usually comes to pass, that he is very soon seized with great depression of strength, anxiety, palpitations, syncope, stupor, giddiness, violent head-ache, and delirium, the pulse becoming at the same time very weak and irregular.

These symptoms are shortly succeeded by nausea, and a vomiting of a dark bilious matter, and in the further progress of the disease, carbuncles make their appearance; buboes arise in different glands, such as the parotid, maxillary, cervical, axillary and inguinal; or petechiæ hæmorrhagies and a colliquative diarrhœa, ensue, which denote a putrid tendency prevailing to a great degree in the mass of the blood.

Such are the characteristic symptoms of this malignant disease, but it seldom happens that they are all to be met with in the same person. Some, in the advanced state of the disease, labour under buboes, others under carbuncles, and others again are covered with petechiæ.

The plague is always to be considered as attended with imminent danger, and when it prevailed in this country about 200 years ago, proved fatal to most of those who were attacked with it. It is probable, however, that many of them died from want of care and proper nourishment, as the infected were forsaken by their nearest friends; because in Turkey and other countries, where attention is paid to the sick, a great many recover.

When the disease is unattended by buboes, it runs its course more rapidly, and is more generally fatal, than when accompanied by such inflammations. The earlier they appear, the milder usually is the disease. When they proceed kindly to suppuration, they always prove critical, and ensure the patient's recovery. A gentle diaphoresis, arising spontaneously, has been known in many instances likewise to prove critical. When carbuncles show a disposition to become gangrenous, the event will be fatal. Petechiæ, hæmorrhagies and colliquative diarrhœa denote the same termination.

Dissections of the plague have discovered the gall bladder full of black bile, the liver very considerably enlarged, the heart much increased in size, and the lungs, kidneys, and intestines beset with carbuncles. They have likewise discovered all the other appearances of putrid fever.

Petalo'des. (From πεταλον, a leaf or thin scale.) This term is by Hippocrates applied to an urine which hath in it flaky substances resembling leaves.

Petasi'tes. (From πετασος, a hat, so named because its leaves are shaped like a hat.) See *Tussilago petasites.*

Pete'chia. (From the Italian *petechio*, a flea-bite, because they resemble the bites of fleas.) A red or purple spot, that mostly appears in contagious diseases, and resembles flea-bites.

PETIT, John Lewis, was born at Paris in 1674. From his childhood he displayed a remarkable degree of penetration, which gained him the attachment of M. de Littre, a celebrated anatomist, who resided in his father's house. He took a pleasure, even at the age of seven, in witnessing the process of dissection; and being allowed to attend the demonstrations of that gentleman, he made such progress, that when scarcely twelve years old, the superintendance of the anatomical theatre was confided to him. He afterwards studied surgery, and was admitted master at Paris in 1700. He became, as it were, the oracle in his profession in that city, and his fame extended throughout Europe. He was sent for to the kings of Poland and Spain, whom he restored to health: they endeavoured to retain him near their persons by liberal offers, but he preferred his native place. He became a member of the Academy of Sciences; and was appointed Director of the Academy of Surgery, and Censor and Royal Professor at the schools. He was likewise chosen a Fellow of the Royal Society of London. He died in 1750. Many memoirs were communicated by him to the French academies. His only separate publication was a Treatise on the Diseases of the Bones, which passed through several editions, but involved him in much controversy. Some posthumous works, relating to surgical diseases and operations, likewise appeared under his name.

Petra'pium. (From *petra*, a rock, and *apium*, parsley; so called because it grows in stony places.) See *Bubon Macedonicum.*

Petrelæ'um. (From πετρα, a rock, and ελαιον, oil.) An oil or liquid bitumen which distils from rocks.

PETRO'LEUM. (From *petra*, a rock, and *oleum*, oil.) The name of petroleum is given to a liquid bituminous substance which flows between rocks, or in different places at the surface of the earth. The more fluid species are distinguished by the name of *naphtha*, and the thicker by those of *pissasphaltum* and *pisselæum*. See *Naphtha, Bitumen,* &c.

Petro'leum Barbade'nse. Barbadoes tar. This is chiefly obtained from the island of Barbadoes, and is sometimes employed externally in paralytic diseases.

Petro'leum ru'brum. *Oleum gabianum.* Red petroleum. A species of rock-oil of a blackish red colour, of thicker consistence, with a less penetrating and more disagreeable smell than the other kinds of petroleum. It abounds about the village of Gabian in Languedoc.

Petro'leum sulphura'tum. A stimulating balsamic remedy given in coughs, asthmas, and other affections of the chest.

Petropharyngæ'us. A muscle which arises in the apophysis petrosa, and is inserted into the pharynx.

Petro-salpingo staphyli'nus. See *Levator palati.*

PETROSELI'NUM. (From πετρα, a rock, and σελινον, parsley.) See *Apium.*

Petroseli'num Macedo'nicum. See *Bubon.*

Petroseli'num vulga're. See *Apium Petroselinum.*

Petro'silex. A species of coarse flint, of a deep blue or yellowish green colour. It is interspersed in veins through rocks; and from this circumstance derives its name.

PEUCE'DANUM. (From πευκη, the pine-tree; so called from its leaves resembling those of the pine-tree.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the hog's fennel and sulphur-wort.

Peuce'danum officina'le. The systematic name of the hog's fennel. *Marathrum sylvestre. Marathrophyllum. Pinastellum. Fœniculum porcinum.* The plant which bears these names in the pharmacopœias is the *Peucedanum officinale*; — *foliis quinquepartitis, filiformibus linearibus,* of Linnæus. The root is the officinal part; it has a strong fetid smell, somewhat resembling that of sulphureous solutions, and an acrid, unctuous, bitterish taste. Wounded, when fresh in the spring or autumn, particularly in the former season, in which the root is most vigorous, it yields a considerable quantity of yellow juice, which soon dries into a solid gummy resin, which retains the taste and strong smell of the root. This, as well as the root, is recommended as a nervine and anti-hysteric remedy.

Peuce'danum silaus. The systematic name of the meadow saxifrage. *Saxifraga vulgaris. Saxifraga anglica. Hippomarathrum. Fœniculum erraticum.* English, or meadow saxifrage. *Peucedanum silaus,* of Linnæus. The roots, leaves, and seeds of this plant have been commended as aperients, diuretics, and carminatives; and appear, from their aromatic smell, and moderately warm, pungent, bitterish taste, to have some claim to these virtues. They are rarely used.

Peye'ri gla'ndulæ. Peyer's glands. Brunner's glands. Small glands situated under the villous coat of the intestines.

Pezi'za auri'cula. *Auricula Judæ. Fungus sambucinus. Agaricus auriculæ forma.* Jew's ears. A membranaceous fungus, *Peziza auricula; concava rugosa auriformis,* of Linnæus, which resembles the human ear. Its virtues are adstringent, and when employed, (by some its internal use is not thought safe,) it is made into a decoction, as a gargle for relaxed sore throats.

Phæno'mena. *Phænomenon.* (From φαινω, to make appear.) All those appearances in the human body which are contrary to the usual process of nature.

PHAGEDÆ'NA. (From φαγω, to eat.) A species of ulcer that spreads very rapidly,

Phagedænics. (*Phagedænica,* sc. *medicamenta*; from φαγω, to eat.) Applications that destroy fungous flesh.

Pha'lacrum. (From φαλακρος, bald.) A surgical instrument, with a blunt, smooth top; as a probe.

Phala'nges. See *Phalanx.*

Phalango'sis. (From φαλαγξ, a row of soldiers.) 1. An affection of the eye lids, where there are two or more rows of hairs upon them.

2. A morbid inversion of the eye-lids.

PHA'LANX. (-gis, *fœm.* from φαλαγξ, a battalion.) The small bones of the fingers and toes, which are distinguished into the first, second, and third phalanx.

Pha'laris canarie'nsis. (From φαλος, white, shining; so named from its white shining seed, and *canariensis,* from its being the principal food of the canary-birds.) Canary-grass. The seed of this plant is well known to be the common food of canary-birds. In the Canary islands, the inhabitants grind it into meal, and make a coarse sort of bread with it.

Pha'llus escule'ntus. The systematic name of the morel fungus. It grows on moist banks and wet pastures, and springs up in May. It is used in the same manner as the truffle, for gravies and stewed dishes, but gives an inferior flavour.

Phanta'sma. (From φανταζω, to make appear.) Imagination. Depraved vision.

Pha'ricum. (From *Pharos,* the island from whence it was brought.) A violent kind of poison.

PHARMACEU'TICA. (From φαρμακευω, to exhibit medicines.) Pharmaceutics, or the doctrine of compounding and dosing medicines.) See *Pharmacy.*

Pharmacochy'mia. (From φαρμακον, a medicine, and χυμια, chemistry.) Pharmaceutic chemistry, or that part of chemistry which respects the preparation of medicines.

PHARMACOPŒ'IA. (From φαρμακον, a medicine, and ποιεω, to make.) A dispensatory, or book of directions for the composition of medicines approved of by medical practitioners, or published by authority. The following are the most noted, viz.

P. *Amstelodamensis.*
P. *Argentoratensis.*
P. *Augetoratensis.*
P. *Bateana.*
P. *Brandenburgensis.*
P. *Brandenburgica.*
P. *Bruxellensis.*
P. *Edinburgensis.*
P. *Hafniensis.*
P. *Londinensis.*
P. *Norimbergensis.*
P. *Parisiensis.*
P. *Ratisbonensis.*
P. *Regia.*

PHARMACOPO'LA. (From φαρμακον, a medicine, and πωλεω, to sell.) An apothecary, or vender of medicines.

PHARMACOPO'LIUM. (From φαρμακον, a medicine, and πωλεω, to sell.) A druggist's or apothecary's shop.

Pharmacopo'sia. (From φαρμακον, a medicine, and ποσις, a potion.) A liquid medicine.

Pharmacothe'ca. (From φαρμακον, a medicine, and τιθημι, to place.) A medicine-chest.

PHARMACY. The art of preparing remedies for the treatment of diseases.

The articles of the Materia Medica, being generally unfit for administration in their original state, are subjected to various operations, mechanical or chemical, by which they become adapted to this purpose. Herein consists the practice of pharmacy, which therefore requires a previous knowledge of the sensible and chemical properties of the substances operated on. The qualities of many bodies are materially changed by heat, especially in conjunction with air and other chemical agents; the virtues of others reside chiefly in certain parts, which may be separated by the action of various menstrua, particularly with the assistance of heat; and the joint operation of remedies on the human body is often very different from what would be anticipated, from that which they exert separately; hence, in the preparations and compositions of the Pharmacopœias, we are furnished with many powerful as well as elegant forms of medicine.

Pharynge'us. (From φαρυγξ, the pharynx.) Belonging to or affecting the pharynx; thus cynanche pharyngea, &c.

Pharynge'thron. φαρυγ∫εθρον. The pharynx, or fauces.

Pharyngostaphyli'nus. A muscle originating in the pharynx and terminating in the septum, above the uvula.

Pharyngoto'mia. (From φαρυγξ, the pharynx, and τεμνω, to cut.) The operation of cutting the pharynx.

PHA'RYNX. (Απο του φερω, because it conveys the food into the stomach.) The muscular bag at the back part of the mouth. It is shaped like a funnel, adheres to the fauces behind the larynx, and terminates in the œsophagus. Its use is to receive the masticated food, and to convey it into the œsophagus.

Phase'olus vulga'ris. (From φασηλος, a little ship, or galliot, which its pods were supposed to resemble.) The systematic name of the kidney-bean. This is often called the *French* bean; when young and well boiled it is easy of digestion, and delicately flavoured. They are less liable to produce flatulency than peas.

Phasga'nium. (From φασγανον, a knife; so called because its leaves are shaped like a knife, or sword.) The herb sword-grass.

Pha'tnium. (From φατνη, a stall.) The socket of a tooth.

PHELLA'NDRIUM. (From φελλος, the cork-tree, and ανδριος, male; so called because it floats upon the water like cork.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Digynia*.

Phella'ndrium aqua'ticum. The systematic name of the water-fennel. *Fœniculum aquaticum.* Fine-leaved water hemlock. The plant which bears this name in the pharmacopœias is the *Phellandrium aquaticum; foliorum ramificationibus divaricatis*, of Linnæus. It possesses vertiginous and poisonous qualities, which are best counteracted by acids, after clearing the primæ viæ. The seeds are recommended by some, in conjunction with Peruvian bark, in the cure of pulmonary phthisis.

Phe'mos. (From φιμοω, to shut up.) A medicine against a dysentery.

Philade'lphus. (From φιλεω, to love, and αδελφος, a brother; so called because, by its roughness, it attaches itself to whatever is near it.) See *Galium Aparine.*

Philanthro'pus. (From φιλεω, to love, and ανθρωπος, a man; so called from its uses.) 1. Medicines relieving the pain of the stone.

2. The herb goose-grass, because it sticks to the garments of those who touch it. See *Galium Aparine.*

Philo'nium. (From *Philo*, its inventor.) A warm opiate.

Phi'ltrum. (From φιλεω, to love.) 1. A philtre, or imaginary medicine, to excite love.

2. The depression on the upper lip, where lovers salute.

Phily'ria. (The name of the daughter of Chiron, who first applied it medicinally.) Mock privet.

PHIMO'SIS. (From φιμω, to bind up.) A constriction or straightness of the extremity of the prepuce, which, preventing the glans from being uncovered, is often the occasion of many troublesome complaints. It may arise from different causes, both in children and grown persons. Children have naturally the prepuce very long; and as it exceeds the extremity of the glans, and is not liable to be distended, it is apt to contract its orifice. This often occasions a lodgment of a small quantity of urine between that and the glans, which, if it grows corrosive, may irritate the parts so as to produce an inflammation. In this case, the extremity of the prepuce becomes more contracted, and consequently the urine more confined. Hence the whole inside of the prepuce excoriates and suppurates; the end of it grows thick and swells, and in some months becomes callous. At other times it does not grow thick, but becomes so strait and contracted as hardly to allow the introduction of a probe. The only way to remove this disorder is by an operation. A phimosis may affect grown persons from the same cause as little children; though there are some grown persons who cannot uncover their glans, or at least not without pain, and yet have not the extremity of the prepuce so contracted as to confine the urine from passing, we notwithstanding find them sometimes troubled with a phimosis, which might be suspected to arise from a venereal taint, but has, in reality, a much more innocent cause. There are, we know, sebaceous glands, situated in the prepuce, round the corona, which secrete an unctuous humour, which sometimes becomes acrimonious, irritates the skin that covers the glans, and the irritation extending to the internal membrane of the prepuce, they both become inflamed, and yield a purulent serum, which cannot be discharged, because the glans is swelled, and the orifice of the prepuce contracted. We find also some grown persons, who, though they never uncovered the glans, have been subject to phimosis from a venereal cause. In some, it is owing to gonorrhœa, where the matter lodged between the prepuce and the glans occasioned the same excoriation as the discharge before mentioned from the sebaceous glands. In others, it proceeds from venereal chancres on the prepuce, the glans, or the frænum; which producing an inflammation either on the prepuce or glans, or both, the extremity of the fore-skin contracts, and prevents the discharge of the matter. The parts, in a very little time, are greatly tumefied, and sometimes a gangrene comes on in less than two days.

Phleborrha'gia. (From φλεψ, a vein, and ρηγνυμι, to break out.) A rupture of a vein.

PHLEBOTOMY. (*Phlebotomia*; from φλεψ, a vein, and τεμνω, to cut.) The opening of a vein.

Phlegm. (From φλεγω, to burn, or to excite.) In chemistry it means water from distillation, but, in the common acceptation of the word, it is a thick and tenacious mucus secreted in the lungs.

Phlegmago'ga. (From φλεγμα, phlegm, and αγω, to drive out.) Medicines which promote the discharge of phlegm.

PHLEGMA'SIA. (From φλεγω, to burn.) An inflammation.

PHLEGMA'SIA DO'LENS. A disease noticed by some of the French writers, under the name of *L'enflure des jambes et des cuisses de la femme accouché*; whilst others have called it *depôt du lait*, from its supposed cause. By the Germans it is called *Œdema lacteum*, and by the English *the white leg*. This disease principally affects women in the puerperal state; in a few instances it has been observed to attack pregnant women; and, in one or two cases, nurses, on losing their children, have been affected by it. Women of all descriptions are liable to be attacked by it during and soon after child-bed; but, those whose limbs have been pained or anasarcous during pregnancy, and who do not suckle their offspring, are more especially subject to it. It has rarely occurred oftener than once to the same female. It supervenes to easy and natural, as well as to difficult and preternatural, births. It sometimes makes its appearance in twenty-four or forty-eight hours after delivery, and at other times, not till a month or six weeks after; but, in general, the attack takes place from the tenth to the sixteenth day of the lying-in. It has, in many instances, attacked women who were recovering from puerperal fever; and, in some cases, has supervened, or succeeded, to thoracic inflammation. It not uncommonly begins with coldness and rigors; these are succeeded by heat, thirst, and other symptoms of pyrexia; and then pain, stiffness, and other symptoms of topical inflammation supervene. Sometimes the local affection is from the first accompanied with, but is not preceded by, febrile symptoms. Upon other occasions, the topical affection is neither preceded by puerperal fever, nor rigors, &c.; but soon after it has taken place, the pulse becomes more frequent, the heat of the body is increased, and the patient is affected with thirst, head-ache, &c. The pyrexia is very various in degree in different patients, and sometimes assumes an irregular remittent or intermittent type. The complaint generally takes place on one side only at first, and the part where it commences is various; but it most commonly begins in the lumbar, hypogastric, or inguinal region, on one side, or in the hip, or top of the thigh, and corresponding labium pudendi. In this case, the patient first perceives a sense of pain, weight, and stiffness, in some of the above-mentioned parts, which are increased by every attempt to move the pelvis, or lower limb. If the part be carefully examined, it generally is found rather fuller or hotter than natural, and tender to the touch, but not discoloured. The pain increases, always becomes very severe, and, in some cases, is of the most excruciating kind. It extends along the thigh, and when it has subsisted for some time, longer or shorter in different patients, the top of the thigh and the labium pudendi become greatly swelled, and the pain is then sometimes alleviated, but accompanied with a greater sense of distension. The pain next extends down to the knee, and is generally the most severe on the inside and back of the thigh, in the direction of the internal cutaneous and the crural nerves; when it has continued for some time, the whole of the thigh becomes swelled, and the pain is somewhat relieved. The pain then extends down the leg to the foot, and is commonly the most severe in the direction of the posterior tibial nerve; after some time, the parts last attacked begin to swell, and the pain abates in violence, but is still very considerable, especially on any attempt to move the limb. The extremity being now swelled throughout its whole extent, appears perfectly or nearly uniform, and it is not perceptibly lessened by an horizontal position, like an œdematose limb. It is of the natural colour, or even whiter, is hotter than natural; excessively tense, and exquisitely tender when touched. When pressed by the finger in different parts, it is found to be elastic, little, if any, impression remaining, and that only for a very short time. If a puncture, or incision, be made into the limb, in some instances, no fluid is discharged; in others, a small quantity only issues out, which coagulates soon after; and in others, a larger quantity of fluid escapes, which does not coagulate; but the whole of the effused matter cannot be drawn off in this way. The swelling of the limb varies both in degree and in the space of time requisite for its full formation. In most instances, it arrives at double the natural size, and in some cases at a much greater. In lax habits, and in patients whose legs have been very much affected with anasarca during pregnancy, the swelling takes place more rapidly than in those who are differently circumstanced; it sometimes arrives, in the former class of patients, at its greatest extent in twenty-four hours, or less, from the first attack.

Instead of beginning invariably at the upper part of the limb, and descending to the lower, this complaint has been known to begin in the foot, the middle of the leg, the ham, and the knee. In whichsoever of these parts it happens to begin, it is generally soon diffused over the whole of the limb, and, when this has taken place, the limb presents the same phenomena, exactly, that have been stated above, as observable when the inguen, &c. are first affected.

After some days, generally from two to eight, the febrile symptoms diminish, and the swelling, heat, tension, weight, and tenderness of the lower extremity, begin to abate, first about the upper part of the thigh, or about the knee, and afterwards in the leg and foot. Some inequalities are found in the limb, which, at first, feel like indurated glands, but, upon being more nicely examined, their edges are not so well defined as those of conglobate glands; and they appear to be occasioned by the effused matter being of different degrees of consistence in different points. The conglobate glands of the thigh and leg are sometimes felt distinctly, and are tender to the touch, but are seldom materially enlarged: and as the swelling subsides, it has happened, that an enlargement of the lymphatic vessels, in some part of the limb, has been felt, or been supposed to be felt.

The febrile symptoms having gradually disappeared, the pain and tenderness of the limb being much relieved, and the swelling and tension being considerably diminished, the patient is debilitated and much reduced, and the limb feels stiff, heavy, benumbed, and weak. When the finger is pressed strongly against it for some time, in different points, it is found to be less elastic than at first, in some places retaining the impression of the finger for a longer, in other places for a shorter time, or scarcely at all. And, if the limb be suffered to hang down, or if the patient walk much, it is found to be more swelled in the evening, and assumes more of an œdematose appearance. In this state the limb continues for a longer or shorter time, and is commonly at length reduced wholly, or nearly to the natural size.

Hitherto the disease has been described as affecting only one of the inferior extremities, and as terminating by resolution, or the effusion of a fluid that is removed by the absorbents; but, unfortunately, it sometimes happens, that after it abates in one limb, the other is attacked in a similar way. It also happens, in some cases, that the swelling is not terminated by resolution; for sometimes a *suppuration* takes place in one or both legs, and ulcers are formed which are difficult to heal. In a few cases, a gangrene has supervened. In some instances, the patient has been destroyed by the violence of the disease, before either suppuration or gangrene have happened.

The *predisposing causes* of this disease, when it occurs during the pregnant or puerperal state, or in a short time afterwards, appear to be, 1st. *The increased irritability and disposition to inflammation which prevail during pregnancy, and in a still higher degree for some time after parturition.* 2ndly. *The over-distended, or relaxed state of the blood-vessels of the inferior part of the trunk and of the lower extremities, produced during the latter months of utero-gestation.*

Amongst the *exciting causes* of this disease may be enumerated, 1st. *Contusions*, or violent exertions of the lower portions of the abdominal and other muscles inserted in the pelvis, or thighs, or of the muscles of the inferior extremities, and contusions of the cellular texture connected with these muscles, during a tedious labour. 2dly. *The application of cold and moisture*, which are known to act very powerfully upon every system in changing the natural distribution of the circulating fluids, and, consequently, in a system predisposed by parturition, may assist in producing the disease, by occasioning the fluids to be impelled, in unusual quantity, into the weakened vessels of the lumbar, hypogastric, and inguinal regions, and of the inferior extremities. 3dly. *Suppression*, or diminution of the lochia, and of the secretion of milk, which, by inducing a plethoric state of the sanguiferous system, may occasion an inflammatory diathesis, may favour congestion, and the determination of an unusual quantity of blood to the vessels of the parts just mentioned, and thus contribute to the production of an inflammation of these parts. 4thly, *Food taken in too large quantity, and of a too stimulating quality*, especially when the patient does not give suck. This cause both favours the production of plethora, and stimulates the heart and arteries to more frequent and violent action; the effects of which may be expected to be particularly felt in the lumbar, hypogastric, or inguinal regions, and in the lower extremities, from the state of their blood-vessels. 5thly, *Standing, or walking too much*, before the arteries and veins of the lower half of the body have recovered sufficiently from the effects of the distension which existed during the latter months of pregnancy. This must necessarily occasion too great a determination of blood to these parts, and consequently too great a congestion in them; whence they will be more stimulated than the upper parts of the body, and inflammation will sometimes be excited in them.

From an attentive consideration of the whole of the phenomena observable in this disease, and of its remote causes and cure, no doubt remains, Dr. Hull thinks, that *the proximate cause consists in an inflammatory affection, producing suddenly a considerable effusion of serum and coagulating lymph from the exhalants into the cellular membrane of the limb.*

PHLEGMA'SIÆ. Inflammations. The second order in the class *pyrexiæ* of Cullen's nosological arrangement, characterized by pyrexia, with topical pain and inflammation; the blood, after venesection, exhibiting a buffy coat.

PHLEGMATORRHA'GIA. (From *φλεγμα*, mucus, and *ρηγνυμι*, to break out.) A discharge of thin mucous phlegm from the nose, through cold.

PHLE'GMON. (From *φλεγώ*, to burn.) *Phlegmone.* An inflammation of a bright red colour, with a throbbing and pointed tumour, tending to suppuration.

PHLOGISTON. (From *φλογιζω*, to burn.) The inflammable principle. Stahl gave this term to a principle which he imagined was pure fire, or the matter of fire fixed in combustible bodies, in order to distinguish it from fire in action, or in a state of liberty.

Phlogisticated air. See *Nitrogen gas.*

PHLOGO'SIS. (From *φλογοω*, to inflame.) Inflammation.

PHLYCTÆ'NA. (Φλυκταιναι, small bladders.) *Phlyctis. Phlysis.* Small pellucid vesicles, that contain a serous fluid. Linnæus and Vogel use *phlyctæna* as synonymous with hydatis.

PHLYZA'CIUM. (From *φλυζω*, to be hot.) A pustule on the skin, excited by fire, or heat. See *Pustule.*

PHŒ'NIX DACTYLI'FERA. (*Phœnix; from Phœnicia,* its native soil.) The systematic name of the date-tree. *Phœnix frondibus pinnatis; foliolis ensiformibus complicatis,* of Linnæus. The fruit is called dactylus or date. Dates are oblong. Before they are ripe, they are rather rough and astringent; but when perfectly matured, they are much of the nature of the fig. See *Ficus Carica.* Senegal dates are most esteemed, they having a more sugary, agreeable flavour than those of Ægypt and other places.

PHOSPHATES. (*Phosphas; from phosphorus.*) Salts formed by the union of phosphoric acid with different bases; thus, *phosphate of ammonia, phosphate of lime,* &c.

PHOSPHITES. *Phosphis.* Salts formed by the combination of phosphorous acid with different bases; thus, *ammoniacal phosphite,* &c.

Phosphorated hydrogen gas. See *Hydrogen gas, phosphuretted.*

PHOSPHORIC ACID. *Acidum phosphoricum.* This acid may be obtained from bones, in the following manner: — Three parts of diluted sulphuric acid are to be poured upon four parts of pulverized ashes of bones and occasionally stirred. By these means the sulphuric acid combines with the calcareous earth, and disengages the phosphoric acid. The mass is then to be repeatedly washed in water, and the ley slowly evaporated: the sulphate of lime, which still adheres, will be thus gradually expelled and separated by filtration; and at last, phosphoric acid, in a dry and vitreous form, will be obtained.

PHOSPHOROUS ACID. This is obtained by the slow combustion of phosphorus at common temperatures. It contains less oxygen than the phosphoric acid.

PHOSPHORUS. (From *φως*, light, and *φερω*, to carry.) *Autophosphorus.* Phosphorus has never been found pure in nature. It is always met with united to oxygen, or in the state of phosphoric acid. In that state it exists very plentifully, and is united to different animal, vegetable, and mineral substances.

Properties. — Phosphorus is a flesh-coloured or yellowish semi-transparent substance, of the consistence of wax, but brittle during frost. In atmospheric air, it is luminous at common temperatures without emitting any material heat. It has a rough disagreeable taste, and its odour resembles that of garlic. Its specific gravity is about 1.770, water being 1.000. Phosphorus crystallizes in laminæ, in needles, or elongated octahedra. Exposed to the light, it becomes covered with a crust, which is first white, next orange, and at last red. It become liquid at a temperature of 99° Fahr. It takes fire spontaneously, and burns rapidly in the open air, at 148° Fahr. with a brilliant white flame, and becomes converted into phosphoric acid. It is volatilized at 554° Fahr. if air be excluded. It is soluble in caustic alkalies, by the assistance of heat. Expressed and essential oils take up a small quantity, and are rendered luminous. Sulphuric ether, nitric ether, and ardent spirit, dissolve it sparingly in the cold. It combines with lime, strontia, barytes, sulphur, and with metals. It is soluble in hydrogen gas, and decomposes nitric acid, and metallic solutions. It acts strongly and frequently like poison, on living animals.

Methods of obtaining Phosphorus. — For some time, phosphorus was made in very inconsiderable quantities, and by a tedious and disagreeable process, consisting in evaporating considerable quantities of urine, and decomposing them by various means.

The following processes, now employed, are more easy and expeditious.

Giobert's process. — According to this method, phosphorus may be obtained very economically, and without an offensive preparation. It consists in pouring a concentrated solution of nitrate of lead, by a little at a time, into a quantity of urine, until no more cloudiness is produced by a further addition of the solution. The mixture is then to be diluted with soft water, and suffered to stand undisturbed; when the precipitate is fully subsided, the clear fluid is to be separated. The precipitate is then formed into a paste, with charcoal powder, and the mass is to be dried gradually in an earthen pan, and then submitted to distillation.

In this process the phosphoric acid of the urine, unites to the oxyde of lead of the nitrate of lead, and the nitric acid joins to the ammonia and soda of the urine; hence phosphate of lead, and nitrate of soda and ammonia are formed. The former, being insoluble, falls to the bottom, and the latter salts remain in the super-natant fluid. On adding charcoal to the phosphate of lead, and exposing it to a high temperature, the union is again broken; the phosphoric acid becomes decomposed, its oxygen unites to the charcoal, and forms carbonic acid gas, which flies off during the distillation; the phosphorus comes over in its simple state, and the metal is left behind in the retort, together with the super-abundant quantity of charcoal.

Nicola's Process. — Take a quantity of bones of adult animals, burn them to whiteness in an open fire, and reduce them to a fine powder. Upon three pounds of this powder, after having been put into a matrass, there may be poured two pounds of concentrated sulphuric acid of commerce; four or five pounds of water must be afterwards added by degrees, to assist the action of the acid. The whole is then to be left in a gently-heated sand-bath, for about twelve hours, or more, taking care to supply the loss of water which happens by evaporation. The next day, a large quantity of water must be added, the clear water afterwards decanted, and the rest strained through a cloth or sieve. The residuary matter is to be edulcorated by repeated affusions of hot water, till it passes tasteless. The water which has been used to wash out the adhering acid, is mixed with the before decanted or strained liquor, and the whole fluid is gradually evaporated in a flat earthen basin, to the consistence of syrup. It is then to be mixed with an equal weight of charcoal powder, and submitted to distillation in an iron or earthen retort. Instead of applying a receiver, the neck of the retort may be immersed in a basin of water, to a small depth, and the phosphorus, as it comes over, will fall in drops to the bottom.

In this process, the sulphuric acid unites with the calcareous earth of the bones, and forms sulphate of lime; and the phosphoric acid of the bones becomes disengaged, and remains dissolved in the liquor. The charcoal, at an elevated temperature, take the oxygen from this acid, and carbonic acid gas is formed, and phosphorus passes over.

Method of purifying Phosphorus. — Phosphorus obtained in either manner is of a dirty blackish colour, and soiled with a certain quantity of charcoal and half-burnt phosphorus, which gives it that appearance. In order to purify it, it must be put into a piece of chamois leather, and closely tied up in it. The whole is then immersed in a vessel of boiling water, the phosphorus melts, and may be pressed through the leather, taking care to keep it under the water.

It is better, however, to purify phosphorus by a second distillation.

Dr. Higgins purified it by means of hydrogen gas.

Methods of moulding Phosphorus into Cylinders. — In order to form phosphorus into sticks, a funnel with a long neck may be used, the lower orifice of which is closed with a cork; the funnel is then to be filled with water, and phosphorus put in it, and this being plunged into boiling water, the heat communicated to the funnel melts the phosphorus, which runs into the neck and acquires that form. The funnel is then removed into a vessel of cold water, and when it is thoroughly cooled, the cork is taken out and the phosphorus thrust out of its mould with a piece of wood, and then preserved in water.

Pelletier invented another method, which is as follows:

Take a few tubes of any length, the apertures of which are of such a size that they can be exactly closed with the extremity of the finger. Melt the phosphorus in boiling water, and apply to it one of the ends of the tube, while you hold the other in your mouth; make a short inspiration, that the phosphorus may ascend a little way in the tube; stop the inspiration when the phosphorus has risen a sufficient height, and close the extremity of the tube with the fore-finger, and immerse it in a basin of cold water. The phosphorus will soon become fixed, and by a slight shake may be separated from the tube.

The earliest account we have concerning the medicinal use of phosphorus, is in the seventh volume of Haller's Collection of Theses, relating to the history and cure of diseases. The original dissertation is entitled, *De Phosphori Loco Medicamenti adsumpti virtute medica, aliquot casibus singularibus confirmata, Auctore J. Gabi Mentz.* There are three cases of singular cures performed by means of phosphorus, narrated in this thesis; the history of these cases and cures was sent to Dr. Gabi Mentz, by his father.

The first instance is of a man who laboured under a putrid fever; for whom the best alexipharmic medicines, as they are called, together with a proper regimen, were prescribed. A diarrhœa, however, ensued, accompanied with great anxiety about the præcordia, delirium, and general prostration of the powers of life. Proper remedies were tried to stop the diarrhœa, and check the disease, but in vain. For three days the patient had been insensible and exhausted. In this extremity the physician had recourse to phosphorus; two grains of which were exhibited, together with a sufficient quantity of theriaca, to make them into a bolus. This occasioned a gentle sweat, and general quiet. The dose was twice repeated in the evening, and again towards morning, with the addition of another grain. The sweat became copious, and the memory and the use of the external senses were restored. The patient, thus revived, was afterwards completely re-established by other remedies.

The second case, is that of a man who laboured under a bilious fever. Although various remedies appear to have been judiciously employed, yet the disease gained ground, until at last the patient was almost quite exhausted. Three grains of phosphorus were exhibited at eleven o'clock in the forenoon, which produced a little quiet; but the patient became so thirsty that he could not refrain from drinking. After this he was quiet for two hours, and a profuse sweat broke out all over his body. The physician seeing this ordered him another dose in the evening. He slept and perspired the whole evening, and by means of proper remedies, was afterwards completely cured.

The third case is entitled a malignant catarrhal fever, with petechiæ. It seems to have been the common *typhus petechialis*, of Cullen, accompanied with cough and other catarrhal symptoms in the beginning. We are informed, that on the third day of the disease, the patient was deprived of the use of his external senses; that he became delirious, and exceedingly exhausted. Two grains of phosphorus were given to him at two o'clock, and two more in the evening, which restored him to his senses, and occasioned a copious sweat. Proper remedies were afterwards employed, which accomplished his recovery.

Dr. Mentz appears to have been one of the first practitioners who tried this heroic remedy internally. Dr. Morgenstern and Dr. Hatman seem both to have afterwards employed it.

The following twelve cases, relating to this interesting subject, are translated from a thesis which is very little known in this country. It is the inaugural dissertation of one Dr. Wolff, who graduated at Gottingen in the year 1791; and who states that the cases are extracted from the private diary of his father, a physician of eminence in Poland, who practised physic with great success and reputation for upwards of thirty years.

Case I. — In the month of August, 1763, I was called to a woman twenty-five years old, whom I found in a state of low delirium. Her pulse was small, weak, and tremulous, almost vanishing, as it were, under the finger. Her whole chest and arms were disfigured with livid spots. Her neighbours and attenndants informed me that she had been seized with a fever about eleven days before I saw her; and that she had been attended by some ignorant practitioner, who, finding that his remedies did not succeed, had deserted her the day before, declaring that God alone could cure her.

The case appeared to me one of those desperate states of disease, in which a practitioner either ought to refrain from doing any thing, or to make trial of some new, bold, and powerful remedy, which might act as an uncommon stimulus to the nerves, and rouse their suppressed energy. Such a remedy I expected to find in phosphorus; and accordingly I ordered my patient five drops of its solution in æther, which contained three grains of phosphorus. They were exhibited in a spoonful of Rhenish wine, and the patient swallowed a few cupsful of an infusion of the flores tiliæ after them. I visited the patient three hours afterwards, and not finding any change, I repeated the dose. Two hours were scarcely elapsed when the pulse began to rise, and the whole body to be diffused with an equal heat; immediately afterwards, the pulse became undulatory, a breathing sweat (sudor halituosus) broke out, and at the same time the delirium subsided.

I exhibited a third dose at the end of sixteen hours; a number of red spots then appeared on the skin, and the patient complained very much of a sense of oppression and pain at the præcordia, and in the abdomen. These symptoms I endeavoured to allay by diluents and frequent emollient clysters, which brought away a great quantity of foul fæces. The Peruvian bark completed the cure.

Case II. — A young woman twenty-two years of age, was, for the first time, delivered of a healthy child. She recovered perfectly well for the first nine days; but being then greatly frightened by some sudden noise in the house, she was seized with a chilly fit, afterwards with flushes of heat, and soon became delirious. I was called to her on the third day, after various remedies had been tried in vain by another physician. Finding that she had a hard pulse, with great oppression in her chest, and a foul tongue, I ordered her to be blooded, to take a solution of Glauber's salts, and to receive some antiphlogistic and emollient clysters. The other physician strongly opposed this advice, contending strenuously for his heating diaphoretic plan; and I therefore returned home. He continued to administer his alexipharmics and cardiac remedies to the unhappy patient. Three days elapsed before I heard any thing of her; but some of her friends then waited on me, entreating me with great earnestness to visit her as her physician had deserted her, declaring that it was impossible for any one to save her.

I found her with a tremulous intermittent pulse, cold extremities, and wandering in her intellects. Of the solution of phosphorus I immediately gave her five drops, in a little Rhenish wine; and in abont two hours after, an equal degree of heat diffused itself over her body, and her senses returned. Upon repeating the dose, a sweat broke out, which relieved her so much that I afterwards could proceed with the proper remedies for the further cure of the complaint.

Case III. — A young man, twenty-two years old, was seized with a putrido-gastric fever, which was accompanied with a white miliary eruption. On the seventh day of the disease, while under the influence of a profuse sweat, he was taken from his bed, at his own desire, and had his linen changed. An hour was scarcely elapsed when he was seized with great anxiety, the miliary eruption almost totally disappeared, and he began to grow delirious. Being called to him, I gave him the solution of phosphorus, with an infusion of elder flowers, and Rhenish wine. In about an hour afterwards, the sweat and eruption returned, and he was snatched from the jaws of death.

Case IV. — A youth, sixteen years old, was seized with a putrid fever, on the seventh day of which he was affected with diarrhœa of so severe a kind, that he had forty-eight stools in the course of a day. Being sent for the day after, I found him with an hippocratic countenance, and subsultus tendinum. Having exhibited the phosphorus twice to him, a general breathing sweat broke out, and the diarrhœa subsided. Afterwards, proper remedies were exhibited, and he was restored to health in fifteen days.

Seven Cases. — During the year 1770 and 1771, while the war was carried on upon the borders of our remotest provinces between the Turks and Russians, a putrid fever took its rise in the camps, and spread itself to us. It was then that I ordered this divine remedy, with the happiest effects, to seven sick who laboured under the putrid fever, some of whom had eruptions, with great prostration of strength.

Case XII. — A young lady of quality, twenty-five years old, endowed with such an exquisite degree of nervous sensibility, that she used frequently to be affected with spasms and convulsive motions without any apparent cause, became pregnant in the year 1774, which was the seventh of her marriage. On the third day preceding delivery, she was seized with a disease which might be justly said to be somewhat between catalepsy and coma vigil. She lay stretched out upon her back, her eyes open and fixed, her legs and arms were quite flexible, and remained in any posture in which they were put; her pulse and respiration were entirely natural, and she swallowed whatever fluid was put into her mouth.

After she had remained three days in this state, she was delivered of a dead child, which, from the marks of putrescency on its body, must have died some days before.

Evacuations carefully employed, antispasmodic and nervous remedies exhibited, both by the mouth and anus, embrocations and liniments, produced such a salutary change, that in fifteen days the patient was able to leave her bed, and the greatest hope was therefore entertained of her complete recovery. But on the twenty-eighth day after delivery, when I went again to visit my patient, (who lived at a considerable distance from me,) I found her complaining of rigor and chilliness of the inferior extremities, her pulse was frequent and small, and her face was more flushed than usual. Frictions, clysters, the pediluvium, and antispasmodics, were all tried, but without producing any favourable event, and, towards the middle of the night, she became totally rigid; yet she had complete possession of her mind, although all the external senses, the sight excepted, were abolished. I gave to her three drops of the solution of phosphorus in a spoonful of wine. Scarcely had an hour elapsed when a warm sweat broke out, and, together with it a white miliary eruption. Afterwards other remedies were exhibited, which effected her recovery.

Such are the cases related by Dr. Wolff, which it is presumed will be found sufficiently interesting to awaken and arrest the attention of the practitioners of this country. A medicine of greater powers cannot be named, if the facts which have been related are correctly true. Little doubt can be entertained that many trials will soon be made with it in this country; but it is to be hoped they will be made with caution, and under as favourable circumstances for the reception of such a powerful stimulus as the nature of the diseases in which it is to be given will admit of.

The dangerous consequences which are likely to follow the injudicious administration of phosphorus cannot be impressed on the mind more strongly than by the relation of a few cases and experiments which are mentioned by Weickard, in the fourth part of his miscellaneous writings, (Vermischte Medicinche Schriften, von M. A. Weickard.) These cases and experiments I literally translated from the original German; a work from which the medical practitioner may reap much information, being replete with practical remarks made by a very attentive and accurate observer.

A Jew, of a phlegmatic habit, was struck with apoplexy. He was speechless and lame, and could not void his fæces except he was assisted by art; his appetite, however was good. Mineral baths, and many remedies, were tried to restore him, but in vain. I was at last tempted to make a trial of phosphorus. At first, from two to three grains were given to him, and it was my intention to have increased the dose to five or six. The first dose was given in a conserve, but the following day in honey. His excrements were luminous. Suddenly, about the middle of the third night, he was seized with violent vomiting, during which he was very ill; but, after the vomiting had ceased, he found himself better. The pulse was small and quick. I did not venture to give any more phosphorus, particularly as his relations were afraid of it. A blister was applied, and cooling and demulcent drinks were exhibited. He looked very ill, seemed quite exhausted, and appeared to suffer pain in the abdomen, which was a little tumefied. He took some nourishment every day; but what he ate was very small in quantity. The vomiting ceased entirely. He lived four days longer, and died. I did not see him the day when that event happened; but he had all the symptoms of having died of gangrene. There were even externally, according to the report of the surgeon, many large gangrenous spots. This case caused me a great deal of uneasiness. The patient could not speak for some time before his death, and could not therefore describe his sufferings.

Almost about the same time that Professor Zessler exhibited the phosphorus to his two patients, the intelligence was communicated to a man who had a tendency to apoplexy and to palsy. He had read in Mellin's Materia Medica all that was said in praise of phosphorus, and he was, in consequence, desirous of making trial of it; but, before he began to take it, he was seized with a kind of apoplectic fit, in which he lay as if deprived of all power. He caused three grains of phosphorus to be rubbed with a little oil, and to be given to him; he took his dose morning and evening. It seemed to revive him, for he got up and walked about the house. He continued to take this medicine several days, upon which he became feverish, and was affected with nausea and loss of appetite. A gentle emetic was given him. Two days after this I saw him for the first time; he told me that he had been violently affected with pain in the abdomen, particularly towards the evening. He was very dry, and his eyes were yellow. When I pressed my hand on the abdomen, it did not give him pain. I ordered him whey, nitre, acid drinks, cream of tartar, and clysters. The third day after this he grew worse. I happened to be out of town, and another physician was sent for, who gave him musk, and various other remedies. I visited him in the evening, and found him gangrenous. His hands were applied to his head, as if he suffered acute pain there; his screams were loud and unremitting; he was delirious, and spoke unintelligibly, and there was not any pulse at the wrist. He died about midnight. Upon inspecting the body, the liver appeared obstructed, and the stomach was gangrenous near the cardia. Is it not to be feared that the phosphorus had occasioned this? or was this the effect of a gouty or rheumatic acrimony thrown upon that part? It was afterwards remarked that a number of people were seized at this time with vomiting and violent pains in the bowels, and also with the iliac passion. Two months were scarcely elapsed when I met with a case in which all the circumstances of the complaint were similar to those narrated in the above-mentioned case, but where the patient had not swallowed a single grain of phosphorus.

The following are some experiments which Dr. Weickard made with phosphorus on dogs: —

"It is now," he observes, "upwards of a year since six grains of phosphorus were offered to a hungry dog. The phosphorus was enclosed in a piece of meat; the dog smelt it, and refused to take it; it was, therefore, forced down his throat. He immediately began to run about the room, exhibiting much anxiety, and seemed desirous to go out. He grew sick, and vomited the bolus, which seemed to be on fire; upon this, the dog again appeared impatient to get out. The smell of the phosphorus, however, ceased to be emitted, by the vomitted matter. The dog smelt it again, and ate it. He immediately became extremely lively, springing quickly from one table to another. The experiments ought to have stopped here; but some one brought another piece of meat, in which there were eight grains of phosphorus enclosed. This was also forced down the dog's throat, and he again vomited it on fire; he did not, however, exhibit the same anxiety to leave the room which he had done the first time, but waited patiently, until the disagreeable fœtor which arose and filled the apartment, had escaped from his morsel, after which he ate it greedily. His inclination to leap and run about was now uncommonly great; nothing was too high or too distant for him; but as we were afraid he might do some injury by this kind of exercise, he was dismissed the apartment. He again vomited once or twice; but since that time has remained perfectly well."

Such are the principal facts related by Weickard. We now come to the latest publication on the subject of phosphorus. It is a letter on its medicinal virtues by M. Alphonso Leroi, and is printed in the only volume of Memoirs which the Society of Emulation at Paris has yet published. One of the first experiments which M. Leroi made was upon himself; he swallowed three grains of phosphorus with some theriaca. It is a wonder, he says, that he was not killed by it; for phosphorus does not require more air than is commonly contained in the stomach, in order to take fire, and burn in such a manner as to have eaten through that organ. "For two hours," the professor observes, "I found myself extraordinarily incommoded; I drank frequently little draughts of cold water. After some hours had elapsed the uneasiness ceased. My urine was high-coloured; but the following day my muscular force was doubled, and I felt an insupportable venereal irritation. I afterwards gave this remedy to the young man whose case is related in the Gazette de Santé, for the 29th of August, 1779. It was truly owing to phosphorus that his life was saved in a most malignant fever, in which the prostration of strength was so great as not to leave many other resources but this remedy."

M. Leroi then proceeds to inform us, that he has frequently employed phosphorus since that time. He at first prescribed it in the form of a lohoch. It is always difficult to pulverize it; but this difficulty he overcame in the following manner: "He puts the phosphorus into warm water, and agitates it violently; it divides itself like oil, into a great number of little globules, and, if cold water be now added, it is precipitated to the bottom in the form of a powder. Of this powder one or two grains are to be taken, and rubbed with a little sugar, a drop or two of oil, and some yolk of an egg. A quarter of a grain every day is quite sufficient to produce great effects."

At other times, he says, he has given it in a mixture of oil, syrup, and some aromatic distilled water. He asserts, that Kunkel gave phosporus internally in England in the form of pills, which were luminous; and he informs us that he himself has found out the manner of composing them; but they require so nice a manipulation, that he has entrusted the secret only to Messrs. Pelletier, the brothers, being warned by his own experience of the mischief which arises from giving it improperly prepared. Each pill contains the eighth of a grain of phosphorus. They are endowed with a soporific and calming property. Professor Leroi has frequently employed them in cases of rheumatismus, in a great number of nervous diseases, pituitous diseases, and in many acute and chronic complaints. He believes that this remedy is capable of prolonging life beyond the natural period; and after having spoken of its great restorative power, he relates the following case in confirmation of this opinion: —

"I was one day called to an old man, aged eighty-seven, the uncle of Madame de Fourqueux, in whom life seemed to be almost totally extinguished. I composed for him a mixture of six ounces of different distilled aromatic waters, one ounce of oil containing three grains of phosphorus, and two ounces of syrup. Of this he took three table-spoonsful every day; and besides this, he took eight drops of volatile alkali, in a glass of sweet aromatic water, twice a-day, before his meals. By these means I illuminated the dying embers of life, and he survived seven years after an attack of weakness in which it must have appeared like madness to attempt to interfere.

"I may safely affirm, that I have been as much occupied in seeking out the cases in which this medicine proves hurtful, as in detecting those in which it is serviceable; and I can assert, not only from my own experience, but also from that of the late M. Lecointre, my pupil, who was physician to the hospital at Nambouillet, that we have not found it hurtful in any one case: that it has only not been useful in some, and that only in such cases in which life was already extinct in some parts of such patients as had not a sufficient portion of living principle in them to reanimate the whole frame."

M. Leroi affirms, that the divisibility of phosphorus is almost infinite; and, in proof of this assertion, he states that "the body of a woman who died of a putrid fever, and who had taken one grain of phosphorus, was entirely luminous within. The hands of the late Rielle, the anatomist, who opened the body, were luminous some hours after they had been washed!!"

Upon maturely considering all the facts which have been brought forward concerning it, little room for doubt will be left in the mind, as to its uncommon powers; but, although this be granted, experience is still wanting to point out the diseases, and various stages of disease, in which it may be employed with equal safety and utility, as also to determine the circumstances under which it would be dangerous even to try it. Thus much may doubtless be asserted concerning it, that it is one of the highest stimuli which we have in the catalogue of the materia medica; and that, although it is affirmed by M. Leroi, and others, to be "calming and sedative," it is only so in such cases as wine, æther, Hoffman's anodyne liquor, and opium, are also found to be calming and sedative, that is, in cases where the arterial action of the whole frame is nearly exhausted, although still quick. Every practitioner should be cautioned against exhibiting it in any inflammatory disease, where much strength exists; and in all cases, very small doses should be first exhibited, and those with the utmost circumspection.

Phosphuret. See *Phosphuretum.*

PHOSPHURE'TUM. (*Phosphuretum,* from *phosphorus.*) A combination of phosphorus not oxygenated, with different bases; as, *phosphuret of copper, phosphuret of iron,* &c.

PHOTOPHO'BIA. (From φως, light, and φοβεω, to dread.) Such an intolerance of light, that the eye, or rather the retina, can scarcely bear its irritating rays. Such patients generally wink, or close their eyes in light, which they cannot bear without exquisite pain, or confused vision. The proximate cause is too great a sensibility in the retina. The species are,

1. *Photophobia inflammatoria,* or dread of light from an inflammatory cause, which is a particular symptom of the internal ophthalmia.

2. *Photophobia,* from the disuse of light, which happens to persons long confined in dark places or prisons; on the coming out of which into light the pupil contracts, and the persons cannot bear light. The depression of the cataract occasions this symptom, which appears as though fire and lightning entered the eye, not being able to bear the strong rays of light.

3. *Photophobia nervea,* or a nervous photophobia, which arises from an increased sensibility of the nervous expansion and optic nerve. It is a symptom of the hydrophobia, and many disorders, both acute and nervous.

4. *Photophobia* from too great light, as looking at the sun, or at the strong light of modern lamps.

PHOTO'PSIA. (From φως, light, and οψις, vision.) Lucid vision. An affection of the eye in which the patient perceives luminous rays, ignited lines, or coruscations.

PHRA'GMUS. (From φρασσω, to enclose, or fence; so called from their being set round like a fence of stakes.) The rows of teeth.

PHRE'NES. (*Phren,* from φρην, the mind, because the antients imagined it was the seat of the mind.) The diaphragm.

PHRENE'SIS. See *Phrenitis.*

PHRENIC NERVE. (*Nervus phrenicus,* from φρενες, the diaphragm.) Diaphragmatic nerve. It arises from an union of the branches of the third, fourth, and fifth cervical pairs, on each side, passes between the clavicle and subclavian artery, and descends from thence by the pericardium to the diaphragm.

PHRE'NICÆ ARTE'RIÆ. The arteries going to the diaphragm.

PHRE'NICÆ VE'NÆ. The veins coming from the diaphragm.

PHRENI'TIS. (Φρενιτις, from φρην, the mind.) *Phrenesis. Phrenetiasis. Phrenismus. Cephalitis. Sphacelismus. Cephalalgia inflammatoria.* By the Arabians *karabitus.* Phrenzy or inflammation of the brain. A genus of disease in the Class *Pyrexiæ,* and Order *Phlegmasiæ,* of Cullen; characterized by strong fever, violent headache, redness of the face and eyes, impatience of light and noise, watchfulness, and furious delirium. It is symptomatic of several diseases, as worms, hydrophobia, &c. Phrenitis often makes its attacks with a sense of fullness in the head, flushing of the countenance, and redness of the eyes, the pulse being full, but in other respects natural. As these symptoms increase, the patient becomes restless, his sleep is disturbed, or wholly forsakes him. It sometimes comes on, as in the epidemic, of which Saalman gives an account, with pain, or a peculiar sense of uneasiness of the head, back, loins, and joints; in some cases, with tremor of the limbs, and intolerable pains of the hands, feet, and legs. It now and then attacks with stupor and rigidity of the whole body, sometimes with anxiety and a sense of tension referred to the breast, often accompanied with palpitation of the heart. Sometimes nausea and a painful sense of weight in the stomach, are among the earliest symptoms. In other cases, the patient is attacked with vomiting, or complains of the heart-burn, and griping pains in the bowels. When the intimate connection which subsists between the brain and every part of the system is considered, the variety of the symptoms attending the commencement of phrenitis is not so surprising, nor that the stomach in particular should suffer, which so remarkably sympathizes with the brain. These symptoms assist in forming the diagnosis between phrenitis and synocha. The pain of the head soon becomes more considerable, and sometimes very acute. "If the meninges," says Dr. Fordyce, "are affected, the pain is acute; if the substance only, obtuse, and sometimes but just sensible." And Dr. Cullen remarks, "I am here, as in other analogous cases, of opinion, that the symptoms above mentioned of an acute inflammation, always mark inflammations of membraneous parts, and that an inflammation of parenchyma, or substance of viscera, exhibits, at least commonly, a more chronic inflammation."

The seat of the pain is various: sometimes it seems to occupy the whole head;

sometimes, although more circumscribed, it is deep-seated, and ill-defined. In other cases it is felt principally in the forehead or occiput. The redness of the face and eyes generally increases with the pain, and there is often a sense of heat and throbbing in the head, the countenance acquiring a peculiar fierceness. These symptoms, for the most part, do not last long before the patient begins to talk incoherently, and to show other marks of delirium. Sometimes, however, Saalman observes, delirium did not come on till the fifth, sixth, or seventh day. The delirium gradually increases, till it often arrives at a state of phrensy. The face becomes turgid, the eyes stare, and seem as if bursting from their sockets, tears, and sometimes even blood, flowing from them; the patient, in many cases, resembling a furious maniac, from whom it is often impossible to distinguish him, except by the shorter duration of his complaint. The delirium assists in distinguishing phrenitis and synocha, as it is not a common symptom in the latter. When delirium does attend synocha, however, it is of the same kind as in phrenitis.

We should, *a priori*, expect in phrenitis considerable derangement in the different organs of sense, which so immediately depend on the state of the brain. The eyes are incapable of bearing the light, and false vision, particularly that termed *muscæ volitantes*, and flashes of light seeming to dart before the eyes, are frequent symptoms. The hearing is often so acute, that the least noise is intolerable: sometimes, on the other hand, the patient becomes deaf; and the deafness, Saalman observes, and morbid acuteness of hearing, sometimes alternate. Affections of the smell, taste, and touch, are less observable.

As the organs of sense are not frequently deranged in synocha, the foregoing symptoms farther assist the diagnosis between this complaint and phrenitis.

The pulse is not always so much disturbed at an early period, as we should expect from the violence of the other symptoms, compared with what we observe in idiopathic fevers. When this circumstance is distinctly marked, it forms, perhaps, the best diagnosis between phrenitis and synocha, and gives to phrenitis more of the appearance of mania. In many cases, however, the fever runs as high as the delirium; then the case often almost exactly resembles a case of violent synocha, from which it is the more difficult to distinguish it if the pulse be full and strong. In general, however, the hardness is more remarkable than in synocha, and in many cases the pulse is small and hard, which may be regarded as one of the best diagnostics between the two complaints, the pulse in synocha being always strong and full. In phrenitis it is sometimes, though rarely, intermitting. The respiration is generally deep and slow, sometimes difficult, now and then interrupted with hiccough, seldom hurried and frequent; a very unfavourable symptom. In many of the cases mentioned by Saalman, pneumonia supervened.

The deglutition is often difficult, sometimes convulsive. The stomach is frequently oppressed with bile, which is an unfavourable symptom; and complete jaundice, the skin and urine being tinged yellow, sometimes supervenes. Worms in the stomach and bowels are also frequent attendants on phrenitis, and, there is reason to believe, may have a share in producing it. The hydrocephalus internus, which is more allied to phrenitis than dropsy of the brain, properly so called, seems often, in part at least, to arise from derangement of the primæ viæ, particularly from worms. We cannot otherwise account for the frequent occurrence of these complaints.

Instead of a superabundance of bile in the primæ viæ, there is sometimes a deficiency, which seems to afford even a worse prognosis. The alvine fæces being of a white colour, and a black cloud in the urine, are regarded by Lobb as fatal symptoms. The black cloud in the urine is owing to an admixture of blood; when unmixed with blood, the urine is generally pale.

There is often a remarkable tendency to the worst species of hæmorrhagies, towards the fatal termination of phrenitis. Hæmorrhagy from the eyes has already been mentioned. Hæmorrhagy from the intestines also, tinging the stools with a black colour, is not uncommon. These hæmorrhagies are never favourable; but the hæmorrhagies characteristic of synocha, particularly that from the nose, sometimes occur at an earlier period, and, if copious, generally bring relief. More frequently, however, blood drops slowly from the nose, demonstrating the violence of the disease, without relieving it. In other cases, there is a discharge of thin mucus from the nose.

Tremors of the joints, convulsions of the muscles of the face, grinding of the teeth, the face from being florid suddenly becoming pale, involuntary tears, a discharge of mucus from the nose, the urine being of a dark red or yellow colour, or black, or covered with a pellicle, the fæces being either bilious or white, and very fœtid, profuse sweat of the head, neck, and shoulders, paralysis of the tongue, general convulsions, much derangement of the internal functions, and the symptoms of other visceral inflammations, particularly of the pneumonia, supervening, are enumerated by Saalman as affording the most unfavourable prognosis. The delirium changing to coma, the pulse at the same time becoming weak, and the deglutition difficult, was generally the forerunner of death. When, on the contrary, there is a copious hæmorrhagy from the hæmorrhoidal vessels, from the lungs, mouth, or even from the urinary passages, when the delirium is relieved by sleep, and the patient remembers his dreams, when the sweats are free and general, the deafness is diminished or removed, and the febrile symptoms become milder, there are hopes of recovery.

In almost all diseases, if we except those which kill suddenly, as the fatal termination approaches, nearly the same train of symptoms supervenes, viz. those denoting extreme debility of all the functions. Saalman remarks that the blood did not always show the buffy coat.

Phrenitis, like most other complaints, has sometimes assumed an intermitting form, the fits coming on daily, sometimes every second day. When phrenitis terminates favourably, the typhus, which succeeds the increased excitement, is generally less in proportion to that excitement, than in idiopathic fevers; a circumstance which assists in distinguishing phrenitis from synocha.

The imperfect diagnosis between these complaints is further assisted by the effects of the remedies employed. For in phrenitis in removing the delirium and other local symptoms the febrile symptoms in general soon abate. Whereas in synocha, although the delirium and head-ache be removed, yet the pulse continues frequent, and other marks of indisposition remain for a much longer time.

It will be of use to present, at one view, the circumstances which form the diagnosis between phrenitis and synocha.

Synocha generally makes its attack in the same manner; its symptoms are few and little varied. The symptoms at the commencement of phrenitis are often more complicated, and differ considerably in different cases. Derangement of the internal functions is comparatively rare in synocha. In phrenitis it almost constantly attends, and often appears very early. The same observation applies to the derangement of the organs of sense. In synocha, the pulse from the commencement is frequent and strong. In phrenitis, symptoms denoting the local affection often become considerable before the pulse is much disturbed. In phrenitis, we have seen that the pulse sometimes very suddenly loses its strength, the worst species of hæmorrhagies, and other symptoms denoting extreme debility, showing themselves; and such symptoms are generally the forerunner of death: but that when the termination is favourable, the degree of typhus which succeeds it is less in proportion to the preceding excitement than in synocha. Lastly, if we succeed in removing the delirium and other symptoms affecting the head, the state of the fever is found to partake of this favourable change more immediately and completely than in synocha, where, although we succeed in relieving the head-ache or delirium, the fever often suffers little abatement.

With regard to the duration of phrenitis, Eller observes, that when it proves fatal, the patient generally dies within six or seven days. In many fatal cases, however, it is protracted for a longer time, especially where the remissions have been considerable. Upon the whole, however, the longer it is protracted, providing the symptoms do not become worse, the better is the prognosis.

On the first attack of the disease we must begin by bleeding the patient, as largely as his strength will permit: it may be productive of more relief to the head, where the patient cannot spare much blood, if the temporal artery, or the jugular vein be opened; and in the progress of the complaint occasional cupping or leeches may materially assist the other means employed. Active cathartics should be given directly after taking blood, calomel with jalap, followed by some saline compound in the infusion of senna, until the bowels are copiously evacuated. The head should be shaved, and kept constantly cool by some evaporating lotion. Antimonial and mercurial preparations may then be given to promote the several discharges, and diminish arterial action: to which purpose digitalis also may powerfully concur. Blisters to the back of the neck, behind the ears, or to the temples, each perhaps successively, when the violence of the disorder is lessened by proper evacuations, may contribute very much to obviate internal mischief. The head should be kept raised, to counteract the accumulation of blood there; and the antiphlogistic regimen must be observed in the fullest extent. Stimulating the extremities by the pediluvium, sinapisms, &c. may be of some use in the decline of the complaint, where an irritable state of the brain appears.

Phreneti'asis. See *Phrenitis.*

Phrensy. See *Phrenitis.*

Phtheiri'asis. (From φθειρ, a louse.) See *Phthiriasis.*

Phthei'rium. See *Phtheiroctonum.*

PHTHIRI'ASIS. (From φθειρ, a louse.) *Morbus Pediculosus. Pediculatio. Phtheiriasis.* A disease in which several parts of the body generate lice, which often puncture the skin, and produce little sordid ulcers.

Phtheiro'ctonum. (From φθειρ, a louse, and κτεινω, to kill, because it destroys lice.) *Phtheirium.* The herb *staphis-agria,* or Staves-acre.

PHTHI'SIS. (From φθιω, to consume.) *Tabes Pulmonalis.* Pulmonary consumption. A disease represented by Dr. Cullen as a sequel of hæmoptysis: it is known by emaciation, debility, cough, hectic fever, and purulent expectoration.

Species: 1. *Phthisis incipiens,* incipient, without any expectoration of pus.

2. *Phthisis humida*, with an expectoration of pus.

3. *Phthisis scrophulosa*, from scrophulous tubercles in the lungs, &c.

4. *Phthisis hæmoptoica*, from hæmoptysis.

5. *Phthisis exanthematica*, from exanthemata.

6. *Phthisis chlorotica*, from chlorosis.

7. *Phthisis syphilitica*, from a venereal ulcer in the lungs.

The causes which predispose to this disease are very numerous. The following are, however, the most general: hereditary disposition; particular formation of body, obvious by a long neck, prominent shoulders, and narrow chest; scrophulous diathesis, indicated by a fine clear skin, fair hair, delicate rosy complexion, large veins, thick upper lip, a weak voice, and great sensibility; certain diseases, such as syphilis, scrophula, the small-pox, and measles; particular employments exposing artificers to dust, such as needle-pointers, stone-cutters, millers, &c. or to the fumes of metals or minerals under a confined and unwholesome air; violent passions, exertions, or affections of the mind, as grief, disappointment, anxiety, or close application to study, without using proper exercise; frequent and excessive debaucheries, late watching, and drinking freely of strong liquors: great evacuations, as diarrhœa, diabetes, excessive venery, fluor albus, immoderate discharge of the menstrual flux, and the continuing to suckle too long under a debilitated state; and, lastly, the application of cold, either by too sudden a change of apparel, keeping on wet clothes, lying in damp beds, or exposing the body too suddenly to cool air, when heated by exercise; in short, by any thing that gives a considerable check to the perspiration. The more immediate or occasional causes of phthisis are, hæmoptysis, pneumonic inflammation proceeding to suppuration, catarrh, asthma, and tubercles, the last of which is by far the most general. The incipient symptoms usually vary with the cause of the disease; but when it arises from tubercles, it is usually thus marked: It begins with a short dry cough, that at length becomes habitual, but from which nothing is spit up for some time, except a frothy mucus that seems to proceed from the fauces. The breathing is at the same time somewhat impeded, and upon the least bodily motion is much hurried: a sense of straitness, with oppression at the chest, is experienced: the body becomes gradually leaner, and great languor, with indolence, dejection of spirits, and loss of appetite, prevail. In this state the patient frequently continues a considerable length of time, during which he is, however, more readily affected than usual by slight colds, and upon one or other of these occasions the cough becomes more troublesome and severe, particularly by night, and it is at length attended with an expectoration, which towards morning is more free and copious. By degrees the matter which is expectorated becomes more viscid and opaque, and now assumes a greenish colour and purulent appearance, being on many occasions streaked with blood. In some cases, a more severe degree of hæmoptysis attends, and the patient spits up a considerable quantity of florid, frothy blood. The breathing at length becomes more difficult, and the emaciation and weakness go on increasing. With these, the person begins to be sensible of pain in some part of the thorax, which, however, is usually felt at first under the sternum, particularly on coughing. At a more advanced period of the disease, a pain is sometimes felt on one side, and at times prevails in so high a degree, as to prevent the person from lying easily on that side; but it more frequently happens, that it is felt only on making a full inspiration, or coughing. Even where no pain is felt it often happens, that those who labour under phthisis cannot lie easily on one or other of their sides, without a fit of coughing being excited, or the difficulty of breathing being much increased. At the first commencement of the disease, the pulse is often natural, or perhaps is soft, small, and a little quicker than usual; but when the symptoms which have been enumerated have subsisted for any length of time, it then becomes full, hard, and frequent. At the same time the face flushes, particularly after eating, the palms of the hands and soles of the feet are affected with burning heat; the respiration is difficult and laborious; evening exacerbations becomes obvious, and by degrees, the fever assumes the hectic form. This species of fever is evidently of the remittent kind, and has exacerbations twice every day. The first occurs usually about noon, and a slight remission ensues about five in the afternoon. This last is, however, soon succeeded by another exacerbation, which increases gradually until after midnight; but about two o'clock in the morning a remission takes place, and this becomes more apparent as the morning advances. During the exacerbations the patient is very sensible to any coolness of the air, and often complains of a sense of cold when his skin is, at the same time preternaturally warm. Of these exacerbations, that of the evening is by far the most considerable. From the first appearance of the hectic symptoms, the urine is high coloured, and deposits a copious branny red sediment. The appetite, however, is not greatly impaired, the tongue appears clean, the mouth is usually moist, and the thirst is inconsiderable. As the disease advances, the fauces put on rather an inflamed appearance, and are beset with aphthæ, and the red vessels of the tunica adnata become of a pearly white. During the exacerbations, a florid circumscribed redness appears on each cheek; but at other times the face is pale, and the countenance somewhat dejected. At the commencement of hectic fever, the belly is usually costive; but in the more advanced stages of it, a diarrhœa often comes on, and this continues to recur frequently during the remainder of the disease; colliquative sweats likewise break out, and these alternate with each other, and induce vast debility. In the last stage of the disease the emaciation is so great, that the patient has the appearance of a walking skeleton; his countenance is altered, his cheeks are prominent, his eyes look hollow and languid, his hair falls off, his nails are of a livid colour, and much incurvated, and his feet are affected with œdematous swellings. To the end of the disease the senses remain entire, and the mind is confident and full of hope. It is, indeed, a happy circumstance attendant on phthisis, that those who labour under it are seldom apprehensive or aware of any danger; and it is no uncommon occurrence to meet with persons labouring under its most advanced stage, flattering themselves with a speedy recovery, and forming distant projects under that vain hope. Some days before death the extremities become cold. In some cases a delirium precedes that event, and continues until life is extinguished.

As an expectoration of mucus from the lungs may possibly be mistaken for purulent matter, and may thereby give us reason to suspect that the patient labours under a confirmed phthisis, it may not be amiss to point out a sure criterion, by which we shall always be able to distinguish the one from the other. The medical world are indebted to the late Mr. Charles Darwin for the discovery, who has directed the experiment to be made in the following manner:

Let the expectorated matter be dissolved in vitriolic acid, and in caustic lixivium, and add pure water to both solutions. If there is a fair precipitation in each, it is a certain sign of the presence of pus; but if there is not a precipitate in either, it is certainly mucus.

Sir Everard Home, in his dissertation on the properties of pus, informs us of a curious, and apparently a decisive mode of distinguishing accurately between pus and animal mucus. The property, he observes, which characterises pus, and distinguishes it from most other substances, is, its being composed of globules, which are visible when viewed through a microscope; whereas animal mucus, and all chemical combinations of animal substances appear in the microscope to be made up of flakes. This property was first noticed by the late Mr. John Hunter.

Pulmonary consumption is in every case to be considered as attended with much danger; but it is more so when it proceeds from tubercles, than when it arises in consequence either of hæmoptysis, or pneumonic suppuration. In the last instance, the risk will be greater where the abscess breaks inwardly, and gives rise to empyema, than when its contents are discharged by the mouth. Even cases of this nature have, however, been known to terminate in immediate death. The impending danger is generally to be judged of, however, by the hectic symptoms; but more particularly by the fetor of the expectoration, the degree of emaciation and debility, the colliquative sweats, and the diarrhœa. The disease has, in many cases, been found to be considerably retarded in its progress by pregnancy; and in a few has been alleviated by an attack of mania.

The morbid appearance most frequently to be met with on the dissection of those who die of phthisis, is the existence of tubercles in the cellular substance of the lungs. These are small tumours which have the appearance of indurated glands, are of different sizes, and are often found in clusters. Their firmness is usually in proportion to their size, and when laid open in this state they are of a white colour, and of a consistence nearly approaching to cartilage. Although indolent at first, they at length become inflamed, and lastly form little abscesses or vomicæ, which breaking and pouring their contents into the bronchia, give rise to a purulent expectoration, and thus lay the foundation of phthisis. Such tubercles or vomicæ are most usually situated at the upper and back part of the lungs; but in some instances they occupy the outer part, and then adhesions to the pleura are often formed.

When the disease is partial, only about a fourth of the upper and posterior part of the lungs is usually found diseased; but in some cases life has been protracted till not one-twentieth part of them appeared, on dissection, fit for performing their function. A singular observation, confirmed by the morbid collections of anatomists, is, that the left lobe is much oftener affected than the right.

The indications are, 1. To moderate inflammatory action. 2. To support the strength, and promote the healing of ulcers in the lungs. 3. To palliate urgent symptoms. The first object may require occasional small bleedings, where the strength will permit, in the early period of the disease; but in the scrophulous this measure is scarcely admissible. Local pain will more frequently lead to the use of cupping, with or without the scarificator, leeches, blisters, and other modes of deriving the nervous energy, as well as blood, from the seat of the disease. The bowels must be kept soluble by gentle laxatives, as cassia, manna, sulphate of magnesia, &c.: and diaphoresis promoted by saline medicines, or the pulvis ipecacuanhæ compositus. The occasional use of an emetic may benefit the patient by promoting the function of the skin, and expectoration, especially where there is a wheezing respiration. The inhalation of steam, impregnated, perhaps, with hemlock, or æther, may be useful as soothing the lungs, and facilitating expectoration. Certain sedative remedies, particularly digitalis, and hemlock, have been much employed in this disease; and in so far as they moderate the circulation, and relieve pain, they are clearly beneficial: but too much reliance must not be placed upon them. Certain sedative gases have been also proposed to be respired by the patient, as hydrogen, &c., but their utility is very questionable. Among the tonic medicines the mineral acids are, perhaps, the most generally useful; however, myrrh and chalybeates, in moderate doses, often answer a good purpose. But a great deal will depend on a due regulation of the diet, which should be of a nutritious kind, but not heating, or difficult of digestion: milk, especially that of the ass; farinaceous vegetables; acescent fruits; the different kinds of shell-fish; the lichen islandicus, boiled with milk, &c. are of this description. Some mode of gestation regularly employed, particularly sailing; warm clothing; removal to a warm climate, or to a pure and mild air in this, may materially concur in arresting the progress of the disease, in its incipient stage. With regard to urgent symptoms requiring palliation, the cough may be allayed by demulcents, but especially mild opiates swallowed slowly; colliquative sweats by acids, particularly the mineral; diarrhœa by chalk, and other astringents, but most effectually by small doses of opium.

Phthi'sis ischia'dica. A wasting of the thigh and leg from an abscess or other cause in the hip.

Phthi'sis pupi'llæ. An amaurosis.

Phtho'ria. (From φθορα, an abortion.) Medicines which promote abortion.

Phu. (φου, or φευ, from *phua*, Arab.) See *Valeriana phu*.

Phyge'thlon. (From φυω, to grow.) A red and painful tubercle in the arm-pits, neck and groins.

Phylacte'rium. (From φυλασσω, to preserve.) An amulet or preservative against infection.

Phylla'nthus e'mblica. The systematic name of the Indian tree, from which the emblic myrobalan is obtained.

Phylli'tis. (From φυλλον, a leaf; so called because the leaves only appear.) See *Asplenium scolopendrium*.

PHY'MA. (From φυω, to produce.) A small tubercle on any external part of the body.

PHY'SALIS. (From φυσαω, to inflate; so called because its seed is contained in a kind of bladder.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*.

Phy'salis alkeke'ngi. The systematic name of the winter cherry. *Alkekengi*. *Halicacabum*. This plant, *Physalis; foliis geminis integris acutis caule herbaceo, infernè subramosa*, of Linnæus, is cultivated in our gardens. The berries are recommended as a diuretic, from six to twelve for a dose, in dropsical and calculous diseases.

PHYSCO'NIA. (From φυσκων, a big-bellied fellow.) *Hyposarca*. *Hypersarchidios*. Enlargement of the abdomen. A genus of disease in the class *cachexiæ*, and order *intumescentiæ*, of Cullen; known by a tumour occupying chiefly one part of the abdomen, increasing slowly, and neither sonorous nor fluctuating. Species: 1. *Hepatica*. 2. *Splenica*. 3. *Renalis*. 4. *Uterina*. 5. *Ab ovario*. 6. *Mesenterica*. 7. *Omentalis*. 8. *Visceralis*.

Physe'ma. (From φυσαω, to inflate.) *Physesis*. A windy tumour.

Physe'ter macroce'phalus. (*Physeter*, from φυσαω, to inflate; so named from its action of blowing and discharging water from its nostrils, and *macrocephalus*, from μακρος, long, and κεφαλη, the head; from the length of its head.) The spermaceti whale. Spermaceti, now called in the pharmacopœia *Cetaceum*, is an oily, concrete, crystalline, semi-transparent matter, obtained from the cavity of the cranium of several species of whales, but principally from the *Physeter macrocephalus*, or spermaceti whale. It was formerly very highly-esteemed, and many virtues were attributed to it; but it is now chiefly employed in affections of the lungs, primæ viæ, kidneys, &c. as a softening remedy, mixed with mucilages. It is also employed by surgeons as an emollient in form of cerates, ointments, &c. See also *Ambergris*.

PHYSIOGNOMY. (*Physiognomia*, from φυσις, nature, and γινωσκω, to know.) The art of knowing the disposition of a person from the countenance.

PHYSIOLOGY. (*Physiologia*, from φυσις, nature, and λογος, a discourse.) The science which treats of the actions and powers of an animated body.

Physoce'le. (From φυσα, wind, and κηλη, a tumour.) A species of hernia, whose contents are distended with wind.

Physoce'phalus. (From φυσα, wind, and κεφαλη, the head.) Emphysema of the head. See *Pneumatosis*.

PHYSOME'TRA. (From φυσαω, to inflate, and μητρα, the womb.) *Hysterophyse*. A windy swelling of the uterus. A tympany of the womb. A genus of disease in the class *cachexiæ*, and order *intumescentiæ*, of Cullen; characterized by a permanent elastic swelling of the hypogastrium, from flatulent distension of the womb. It is a rare disease, and seldom admits of a cure.

Phyteu'ma. (From φυτευω, to generate; so called from its great increase and growth.) The herb rocket.

PHYTOLA'CCA. (*Phytolacca*. From

φυτον, a plant, and λακκα, gum lac; so called because it is of the colour of lacca.) The name of a genus of plants. Class, *Decandria.* Order, *Decagynia.*

Phytola'cca decandria. The systematic name of the Pork-physic. Pork-weed. Poke-weed. Red weed of Virginia. Red night-shade. American night-shade. *Solanum racemosum Americanum. Solanum magnum virginianum rubrum.* In Virginia and other parts of America, the inhabitants boil the leaves, and eat them in the manner of spinach. They are said to have an anodyne quality, and the juice of the root is violently cathartic. The Portuguese had formerly a trick of mixing the juice of the berries with their red wines, in order to give them a deeper colour; but it was found to debase the flavour. This was represented to his Portuguese majesty, who ordered all the stems to be cut down yearly before they produced flowers, thereby to prevent any farther adulteration. This plant has been used as a cure for cancers, but to no purpose.

PHYTOLOGY. (*Phytologia.* From φυτον, an herb, and λογος, a discourse.) That part of the science of natural history which treats on plants.

Phytominera'lia. (From φυτον, a plant, and *mineralis,* a mineral.) Substances of a vegetable and mineral nature; as amber.

PI'A MA'TER. (*Pia mater,* the natural mother; so called because it embraces the brain, as a good mother folds her child.) *Localis membrana. Meninx tenuis.* A thin membrane, almost wholly vascular, that is firmly accreted to the convolutions of the cerebrum, cerebellum, medulla oblongata, and medulla spinalis. Its use appears to be, to distribute the vessels to, and contain the substance of, the cerebrum.

PI'CA. (*Pica,* the magpie; so named because it is said the magpie is subject to this affection.) *Picatio. Malacia. Allotriophagia. Citta. Cissa.* Longing. Depraved appetite, with strong desire for unnatural food. It is very common to pregnant women and chlorotic girls, and by some it is said to occur in men who labour under suppressed hæmorrhoids.

Pi'cea. (Πιτυς, pitch.) The common or red fir or pitch-tree is so termed. The cones, branches, and every part of the tree, affords the common resin called frankincense. See *Pinus abies.*

Pichu'rim. See *Pechurim.*

Pi'cris echioi'des. (From πικρος, bitter, and *echioides,* from εχις, a viper, and ειδος, resemblance.) The systematic name of the common ox-tongue; the leaves are frequently used as a pot-herb by the country people, who esteem it good to relax the bowels.

Picto'nius. (From the Pictones, who were subject to this disease.) Applied to a species of colic. It should be rather called collica pictorum, the painter's colic, because, from their use of lead, they are much afflicted with it.

Pie'strum. (From πιεζω, to press.) An instrument to compress the head of a dead fœtus, for its more easy extraction from the womb.

Pig-nut. Earth-nut. Ground-nut. The bulbous root of the *Bunium bulbocastanum,* of Linnæus: which see. Pig-nuts, so called because that animal is very fond of them, and will dig with its snout to some depth for them, are of a dirty, brownish colour, a little bigger than a hazel-nut, and flavoured like the chesnut. They are said to possess a styptic quality, and are deemed serviceable in laxity of the kidneys.

PIGME'NTUM. (From *pingo,* to paint.) Pigment. This name is given by anatomists to a mucous substance found in the eye, which is of two kinds. *The pigment of the iris,* is that which covers the anterior and posterior surface of the iris, and gives the beautiful variety of colour in the eyes. *The pigment of the choroid membrane,* is a black or brownish mucus, which covers the anterior surface of the choroid membrane, contiguous to the retina and the interior surface of the ciliary processes.

Pi'la hy'stricis. The bezoar hystricis.

Pi'la mari'na. A species of alcyonium found on sea-coasts amongst wrack. It is said to kill worms, and when calcined to be useful in scrophula.

Piles. See *Hæmorrhois.*

Pile-wort. See *Ranunculus ficaria.*

Pi'li conge'niti. The hair of the head, eye-brows, and eye-lids, are so termed, because they grow *in utero.*

Pi'li postge'niti. The hair which grows from the surface of the body after birth, is so termed, in contradiction to that which appears before birth; as the hair of the head, eye-brows, and eye-lids.

Pilose'lla. (From *pilus,* hair, because its leaves are hairy.) See *Hieracium.*

Pills, aloëtic, with myrrh. See *Pilulæ aloës cum myrrha.*

Pills, compound aloëtic. See *Pilulæ aloës compositæ.*

Pills, compound gamboge. See *Pilulæ cambogiæ compositæ.*

Pills, compound galbanum. See *Pilulæ galbani compositæ.*

Pills, compound squill. See *Pilulæ scillæ compositæ.*

Pills of iron with myrrh. See *Pilulæ ferri compositæ.*

Pills, soap, with opium. See *Pilulæ saponis cum opio.*

Pills, mercurial. See *Pilulæ hydrargyri.*

Pills, compound calomel. See *Pilulæ hydrargyri submuriatis compositæ.*

PI'LULA. A pill. A small round form of medicine the size of a pea. The consistence of pills is best preserved by keeping the mass in bladders, and occasionally moistening it. In the direction of masses to be thus divided, the proper consistence is to be looked for at first, as well as its preservation afterwards; for if the mass then become hard and dry, it is unfit for that division for which it was originally intended; and this is in many instances such an objection to the form, that it is doubtful whether, for the purposes of the pharmacopœia, the greater number of articles had not better be kept in powder, and their application to the formation of pills, left to extemporaneous direction.

Pi′lulæ a′loes compo′sitæ. Compound aloetic pills. "Take of extract of spike-aloe, powdered, an ounce; extract of gentian, half an ounce; oil of caraway, forty minims; simple syrup, as much as is sufficient. Beat them together, until they form an uniform mass." From fifteen to twenty-five grains prove moderately purgative and stomachic.

Pi′lulæ a′löes cum my′rrha. Aloetic pills with myrrh. "Take of extract of spike aloe, two ounces; saffron, myrrh, of each an ounce; simple syrup, as much as is sufficient. Powder the aloes and myrrh separately; then beat them all together until they form an uniform mass." From ten grains to a scruple of this pill, substituted for the *pilula Rufi*, prove stomachic and laxative, and are calculated for delicate females, especially where there is uterine obstruction.

Pi′lulæ cambo′giæ compo′sitæ. Compound gamboge pills. "Take of gamboge, powdered, extract of spike-aloe, powdered, compound cinnamon powder, of each a drachm; soap, two drachms. Mix the powders together: then having added the soap, beat the whole together until they are thoroughly incorporated." These pills are now first introduced in the London Pharmacopæia, as forming a more active purgative pill than the pil. aloës cum myrrha, and in this way supplying an article very commonly necessary in practice. The dose is from ten grains to a scruple.

Pi′lulæ ammoniare′ti cu′pri. An excellent tonic and diuretic pill, which may be given with advantage in dropsical diseases, where tonics and diuretics are indicated.

Pi′lulæ fe′rri compo′sitæ. Compound iron pills. Pills of iron and myrrh. "Take of myrrh, powdered, two drachms; subcarbonate of soda, sulphate of iron, sugar, of each a drachm. Rub the myrrh with the subcarbonate of soda; add the sulphate of iron, and rub them again; then beat the whole together until they are thoroughly incorporated." These pills answer the same purpose as the mistura ferri composita. The dose is from ten grains to one scruple.

Pi′lulæ ga′lbani compo′sitæ. Compound galbanum pills. Formerly called *pilulæ gummosæ*. "Take of galbanum gum resin, an ounce; myrrh, sagapenum, of each an ounce and half; assafœtida gum resin, half an ounce; simple syrup, as much as is sufficient. Beat them together until they form an uniform mass." A stimulating antispasmodic and emmenagogue. From half a scruple to half a drachm may be given three times a day in nervous disorders of the stomach and intestines, in hysterical affections and hypochondriasis.

Pi′lulæ hydra′rgyri. Mercurial pills. Often from its colour called the blue pill. "Take of purified mercury, two drachms; confection of red roses, three drachms; liquorice-root, powdered, a drachm. Rub the mercury with the confection, until the globules disappear; then add the liquorice-root, and beat the whole together, until they are thoroughly incorporated."

An alterative and anti-venereal pill, which mostly acts on the bowels if given in sufficient quantity to attempt the removal of the venereal disease, and therefore requires the addition of opium. The dose is from five grains to a scruple. Three grains of the mass contain one of mercury. Joined with the squill pill, it forms an excellent expectorant and alterative, calculated to assist the removal of dropsical diseases of the chest, and asthmas attended with visceral obstruction.

Pi′lulæ hydra′rgyri submuri′atis compo′sitæ. Compound pills of submuriate of mercury. "Take of submuriate of mercury, precipitated sulphuret of antimony, of each a drachm; guaiacum resin, powdered, two drachms. Rub the submuriate of mercury, first with the precipitated sulphuret of antimony, then with the guaiacum resin, and add as much acacia mucilage as may be requisite to give the mass a proper consistence." This is intended as a substitute for the famed Plummer's pill. It is exhibited as an alterative in a variety of diseases, especially cutaneous eruptions, pains of the venereal or rheumatic kind, cancerous and schirrous affections, and chronic ophthalmia. The dose is from five to ten grains. In about five grains of the mass there is one grain of the submuriate of mercury.

Pi′lulæ sapo′nis cum o′pio. Pills of soap and opium. Formerly called pilulæ saponaceæ. "Take of hard opium powdered, half an ounce; hard soap, two ounces. Beat them together until they are thoroughly incorporated." The dose is from three to ten grains. Five grains of the mass contain one of opium.

Pi′lulæ sci′llæ compositæ. Compound squill pills. "Take of squill root fresh dried and powdered, a drachm; ginger-root, powdered, hard soap, of each three drachms; ammoniacum, pewdered, two drachms. Mix the powders together: then beat them with the soap, adding as much simple syrup as may be sufficient to give a proper consistence.

An attenuant, expectorant, and diuretic pill, mostly administered in the cure of asthma and dropsy. The dose is from ten grains to a scruple.

PI'LUS. (Πιλος, wool carded.) The short hair which is found all over the body. See *Capillus.*

PIME'NTA. (From *Pimienta.* Sp. pepper.) See *Myrtus pimenta.*

Pime'nto. See *Myrtus pimenta.*

Pimpernel. The Anagallis arvensis is sometimes so called. See *Anagallis.*

Pimpernel, water. See *Veronica beccabunga.*

PIMPINE'LLA. (*Quasi bipinella,* or *bipenula,* from the double pennate order of its leaves.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.* Pimpinella.

2. The pharmacopœial name of the *Pimpinella alba* and *magna.*

Pimpine'lla a'lba. A variety of the *pimpinella magna,* whose root is indifferently used with that of the greater pimpinell. The pimpinella saxifraga was also so called.

Pimpine'lla ani'sum. The systematic name of the anise plant. *Anisum. Anisum vulgare. Pimpinella anisum; foliis radicalibus trifidis incisis,* of Linnæus. A native of Egypt. Anise seeds have an aromatic smell, and a pleasant, warm, and sweetish taste. An essential oil and distilled water are prepared from them, which are employed in flatulencies and gripes, to which children are more especially subject; also in weakness of the stomach, diarrhœas, and loss of tone in the primæ viæ.

Pimpine'lla ita'lica. The root which bears this name in some pharmacopœias is that of the *Sanguisorba officinalis,* of Linnæus. It is now fallen into disuse.

Pimpine'lla ma'gna. The systematic name of the greater pimpinella. *Pimpinella nigra.* The root of this plant has been lately extolled in the cure of erysipelatous ulcerations, tinea capitis, rheumatism, and other diseases.

Pimpine'lla ni'gra. See *Pimpinella magna.*

Pimpine'lla no'stras. See *Pimpinella.*

Pimpine'lla saxi'fraga. The systematic name of the Burnet saxifrage. Several species of pimpinella were formerly used officinally; but the roots which obtain a place in the Materia Medica of the Edinburgh Pharmacopœia, are those of the Burnet saxifrage, the *Pimpinella saxifraga; soliis pinnatis, foliolis radicalibus subrotundis, ummis linearibus,* of Linnæus. They have an unpleasant smell; and a hot, pungent, bitterish taste: they are recommended by several writers as a stomachic: in the way of gargle, they have been employed for dissolving viscid mucus, and to stimulate the tongue when that organ becomes paralytic.

Pinaste'llum. (From *pinus,* the pine-tree; so called because its leaves resemble those of the pine-tree.) Hog's fennel. See *Peucedanum.*

Pi'nea. The stone-pine. The young and fresh fruit of this plant, *Pinus pinea,* of Linnæus, are eaten in some countries in the same manner as almonds here, either alone, or mixed with sugar. They are nutritive, demulcent, and laxative.

PINEAL GLAND. (Called *pineal,* from *pinea,* a pine-apple, from its supposed resemblance to that fruit.) *Glandula pinealis. Conarium.* A small heart-like substance, about the size of a pea, situated immediately over the corpora quadrigemina, and hanging from the *thalami nervorum opticorum* by two crura or peduncles. Its use is not known. It was formerly supposed to be the seat of the soul.

Pine-apple. See *Bromelia ananas.*

Pine-thistle. See *Atractylis gummifera.*

Pi'neus pu'rgans. See *Jatropha curcas.*

PINGUE'DO. (From *pinguis,* fat.) Fat. See *Fat.*

PINGUI'CULA. (From *pinguis,* fat, so called because its leaves are fat to the touch.) The name of a genus of plants. Class, *Diandria.* Order, *Monogynia.* Butterwort.

Pingui'cula vulga'ris. *Sanicula montana. Sanicula eboracensis. Viola palustris. Liparis. Cucullata. Dodecatheon Plinii.* Butterwort. Yorkshire sanicle. The remarkable unctuosity of this plant has caused it to be applied to chaps, and as a pomatum to the hair. Decoctions of the leaves in broths are used by the common people in Wales as a cathartic.

Pinho'nes i'ndici. See *Jatropha curcas.*

Pink, Indian. See *Spigelia.*

Pi'nna. (Πιννα, a wing.) The name of the lateral and inferior part of the nose, and the broad part of the ear.

Pinna'culum. (Dim. of *pinna,* a wing.) A pinnacle. A name of the uvula from its shape.

PI'NUS. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Monadelphia.* The pine-tree.

Pi'nus a'bies. *Elate Theleia.* The Norway spruce fir, which affords the Burgundy pitch and common frankincense.

1. *Pix arida.* Formerly called *Pix burgundica.* The prepared resin of the *Pinus abies; foliis solitariis, subtetragonis acutiusculis distichis, ramis infra nudis conis cylindraceis,* of Linnæus. It is of a solid consistence, yet somewhat soft, of a reddish brown colour, and not disagreeable

smell. It is used externally as a stimulant in form of plaster in catarrh, pertussis, and dyspnœa.

2. *Abietis resina. Thus:* Common frankincense. This is a spontaneous exudation, and is brought in small masses, or tears, chiefly from Germany, but partly and purest from France. It is applicable to the same purposes as Burgundy pitch, but little used at present.

Pi′nus balsa′mea. The systematic name of the tree which affords the Canada balsam. *Abies canadensis.* The Canada balsam is one of the purest turpentines, procured from the *Pinus balsamea*, of Linnæus, and imported from Canada. For its properties, see *Turpentine.*

Pi′nus ce′mbra. This affords the Carpathian balsam. *Oleum Germanis. Carpathicum.* This balsam is obtained both by wounding the young branches of the *Pinus cembra; foliis quinis, levibus*, of Linnæus, and by boiling them. It is mostly diluted with turpentine, and comes to us in a very liquid and pellucid state, rather white.

Pi′nus la′rix. The systematic name of the tree which gives us the agaric and Venice turpentine. The larch tree. The Venice turpentine issues spontaneously through the bark of the *Pinus larix; foliis fasciculatis mollibus obtusiusculis bracteis extra squamas strobilorum extantibus.* Hort. Kew. It is usually thinner than any of the other sorts; of a clear whitish or pale yellowish colour; a hot, pungent, bitterish, disagreeable taste; and a strong smell, without any thing of the aromatic flavour of the Chian kind. For its virtues, see *Turpentine.* See also *Boletus laricis.*

Pi′nus pi′cea. The systematic name of the silver fir.

Pi′nus pi′nea. The systematic name of the stone-pine tree. See *Pinea.*

Pi′nus sylve′stris. The systematic name of the Scotch fir, which affords common turpentine, and its oil, resin, tar, and pitch.

1. Common turpentine is the juice, which flows out on the tree being wounded in hot weather. See *Turpentine.*

2. From this the oil is obtained by distillation, mostly with water, in which case yellow resin is left; but if without addition, the residuum is common resin, or colophony. The oil is ordered to be purified in the pharmacopœia. See *Oleum terebinthinæ rectificatum.*

3. When the cold begins to check the exudation of the juice, part of this concretes in the wounds; which is collected, and termed *galipot* in Provence, *barras* in Guienne, sometimes also *white resin*, when thoroughly hardened by long exposure to the air. See *Resina flava*, and *R. Alba.*

4. The *Pix liquida*, or tar, is produced from the *Pinus sylvestris; foliis geminis rigidis, conis, ovato-conicis longitudine foliorum subgeminis basi rotundatis*, of Linnæus, by cutting it into pieces, which are enclosed in a large oven constructed for the purpose. It is well known for its economical uses. Tar-water, or water impregnated with the more soluble parts of tar, was sometime ago a very fashionable remedy in a variety of complaints, but is in the present practice fallen into disuse.

5. Common pitch is tar inspissated; now termed in the pharmacopœia, *Resina nigra*, which see.

PI′PER. (πεπερι: from πεπτω, to concoct, because by its heat it assists digestion.) Pepper. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Trigynia.*

Pi′per a′lbum. *Leucopiper.* See *Piper nigrum.*

Pi′per brasilia′num. *Guinea pepper.*

Pi′per calecu′ticum. *Guinea pepper.*

Pi′per caryophylla′tum. *Jamaica pepper.*

Pi′per cauda′tum. See *Piper cubeba.*

Pi′per cube′ba. The plant whose berries are called cubebs. *Piper caudatum. Cumamus.* The dried berries of the *Piper, foliis oblique ovatis, seu oblongis venosis acutis, spica solitaria pedunculata oppositifolia, fructibus pedicellatis*, of Linnæus. They are of an ash-brown colour, generally wrinkled, and resembling pepper, but furnished each with a slender stalk. They are a warm spice, of a pleasant smell, and moderately pungent taste, imported from Java; and may be exhibited in all cases where warm spicy medicines are indicated, but they are inferior to pepper.

Pi′per decortica′tum. White pepper.

Pi′per fava′sci. The clove-berry tree.

Pi′per guine′ense. See *Capsicum.*

Pi′per hispa′nicum. See *Capsicum.*

Pi′per i′ndicum. Guinea or Indian pepper. See *Capsicum.*

Pi′per jamaice′nse. See *Myrtus pimenta.*

Pi′per lo′ngum. *Macropiper. Acapatli. Catu-tripali. Pimpilim.* Long pepper. *Piper, foliis cordatis petiolatis sessilibusque*, of Linnæus. The berries or grains of this plant are gathered while green, and dried in the heat of the sun, when they change to a blackish or dark-grey colour. They possess precisely the same qualities as the piper indicum, only in a weaker degree.

Pi′per lusita′nicum. See *Capsicum.*

Pi′per mura′le. See *Sedum acre.*

Pi′per ni′grum. *Melanopiper. Molagocodi. Lada. Piper aromaticum.* Black pepper. This species of pepper is obtained in the East Indies, from the *Piper, foliis ovatis septem-nerviis glabris, petiolis simplicissimis*, of Linnæus. Its virtues are similar to those of the other peppers. The black and white pepper are both obtained from the same tree, the difference depending on their preparation and degrees of maturity.

Piperi'tis. (From *piper*, pepper, so called because its leaves and roots are biting like pepper to the taste.) The herb dittany or lepidium.

Piramida'lia co'rpora. See *Corpora pyramidalia*.

PISIFO'RME OS. The fourth bone of the first row of the carpus.

Pismire. See *Formica*.

Piss-a-bed. See *Leontodon taraxacum*.

Pissaspha'ltus. (From πισσα, pitch, and ασφαλτος, bitumen.) The thicker kind of rock oil.

PISTA'CIA. (Πιςακια, supposed to be a Syrian word.) The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Pentandria*.

Pista'cia lenti'scus. The systematic name of the tree which affords the mastich. *Mastiche*. *Mastix*. The tree which affords this resin, is the *Pistacia; foliis abrupte pinnatis, foliolis lanceolatis*, of Linnæus. A native of the south of Europe. In the island of Chio, the officinal mastich is obtained most abundantly; and, according to Tournefort, by making transverse incisions in the bark of the tree, from whence the mastich exudes in drops, which are suffered to run down to the ground, when, after sufficient time is allowed for their concretion, they are collected for use. Mastich is brought to us in small, yellowish, transparent, brittle tears, or grains; it has a light agreeable smell, especially when rubbed, or heated; on being chewed, it first crumbles, soon after sticks together, and becomes soft and white, like wax, without impressing any considerable taste. It is considered to be a mild corroborant and adstringent; and as possessing a balsamic power, it has been recommended in hæmoptysis, proceeding from ulceration, leucorrhœa, debility of the stomach, and in diarrhœas and internal ulcerations. Chewing this drug has likewise been said to have been of use in pains of the teeth and gums, and in some catarrhal complaints; it is, however, in the present day, seldom used either externally or internally. The wood abounds with the resinous principle, and a tincture may be obtained from it, which is esteemed in some countries in the cure of hæmorrhages, dysenteries, and gout.

Pista'cia nux. Pistachio-nut. See *Pistacia vera*.

Pista'cia terebi'nthus. The systematic name of the tree which gives out the Cyprus turpentine. *Terebinthina de Chio*. Chio or Chian turpentine. This substance is classed among the resins. It is procured by wounding the bark of the trunk of the *Pistacia terebinthus*, of Linnæus. The best Chio turpentine is about the consistence of honey, very tenacious, clear, and almost transparent; of a white colour, inclining to yellow, and a fragrant smell, moderately warm to the taste, but free from acrimony and bitterness. Its medicinal qualities are similar to those of the other turpentines. See *Turpentine*.

Pista'cia ve'ra. The systematic name of the tree which affords the *nux pistacia*. An oblong pointed nut, about the size and shape of a filbert, including a kernel of a pale greenish colour, covered with a yellow or greenish skin. It is the produce of a large tree, the *Pistacia vera; foliis imparipennatis; foliolis subovatis recurvis*, of Linnæus. Pistachio-nuts have a sweetish unctuous taste, resembling that of sweet almonds, and, like the latter, afford an oil, and may be formed into an emulsion.

Pistachio-nut. See *Pistacia vera*.

Pistolo'chia. (From πιςος, faithful, and λοχεια, parturition, so called because it was thought to promote delivery.) Birthwort.

PITCAIRN, Archibald, was born at Edinburgh in 1652. He applied to the study of divinity, and afterwards of the law, in that university, with such intensity, that he was threatened with symptoms of consumption, for the removal of which he went to Montpelier; where his attention was diverted to medicine; on his return he applied himself zealously to the mathematics, which appearing to him capable of elucidating medical subjects, he was determined in consequence to adopt this profession. After attending diligently to the various branches at Edinburgh, he went to complete his medical studies at Paris, and then returned to settle in his native place, where he quickly obtained a large practice, and extensive reputation. In 1688 he published a little tract to establish Harvey's claim to the Discovery of the Circulation. About four years after he was invited to become professor of physic at Leyden, which he accepted accordingly; and he ranked among his pupils the celebrated Boerhaave. However his mathematical illustrations of medicine not being favourably received, he relinquished the appointment in about a year. He returned then to practise at Edinburgh, where his life terminated in 1713. He published while at Leyden, and subsequently, several dissertations to prove the utility of mathematics in medical discussions; which were more than once reprinted. After his death his lectures were made public, under the title of "Elementa Medicinæ Physico-Mathematica."

Pitch. See *Resina nigra*.

Pitch, Burgundy. See *Pinus abies*.

Pitch, Jews. See *Bitumen judaicum*.

Pitch-tree. See *Picea*.

Pitta'cium. (From πιττα, pitch.) A pitch plaster.

Pitto'ta. (From πιττα, pitch.) Medicines in which pitch is the principal ingredient.

PITUI'TA. Phlegm, or viscid and glutinous mucus.

PITUITARY GLAND. *Glandula pituitaria.* A gland situated within the cranium, between a duplicature of the dura mater, in the sella turcica of the sphenoid bone.

PITUITARY MEMBRANE. *Membrana pituitaria.* Schneiderian membrane. The mucous membrane that lines the nostrils and sinuses, communicating with the nose, is so called, because it secretes the mucus of those parts, to which the antients assigned the name of *pituita*.

PITYRI'ASIS. (From *πιτυρον*, bran, so named from its branny-like appearance.) A genus in the second order, or scaly diseases, of Dr. Willan's cutaneous diseases. The pityriasis consists of irregular patches of small thin scales, which repeatedly form and separate, but never collect into crusts, nor are attended with redness or inflammation, as in the lepra and scaly tetter. Dr. Willan distinguishes pityriasis from the porrigo of the Latins, which has a more extensive signification, and comprehends a disease of the scalp, terminating in ulceration; whereas the former is, by the best Greek authors, represented as always dry and scaly. Thus, according to Alexander and Paulus, pityriasis is characterised by "the separation of slight furfuraceous substances from the surface of the head, or other parts of the body, without ulceration. Their account of this appearance is conformable to experience; and the two varieties of it which they have pointed out may be denominated, *Pityriasis capitis*, and *Pityriasis versicolor*.

Pityriasis capitis, when it affects very young infants, is termed by nurses the dandriff. It appears at the upper edge of the forehead and temples, as a slight whitish scurf set in the form of a horse-shoe; on other parts of the head there are large scales, at a distance from each other, flat, and semi-pellucid. Sometimes, however, they nearly cover the whole of the hairy scalp, being close together, and imbricated. A similar appearance may take place in adults; but it is usually the effect of lepra, scaly tetter, or some general disease of the skin.

Elderly persons have the pityriasis capitis in nearly the same form as infants; the only difference is, that this complaint in old people occasions larger exfoliations of the cuticle.

The *pityriasis versicolor* chiefly affects the arms, breast, and abdomen. It is diffused very irregularly; and being of a different colour from the usual skin colour, it exhibits a singular chequered appearance. These irregular patches, which are at first small, and of a brown or yellow hue, appear at the scrobiculus cordis, about the mammæ, clavicles, &c. Enlarging gradually, they assume a tesselated form; in other cases they are branched, so as to resemble the foliaceous lichens growing on the bark of trees; and sometimes when the discolouration is not continuous, they suggest the idea of a map being distributed on the skin like islands, continents, peninsulas, &c. All the discoloured parts are slightly rough, with minute scales, which soon fall off, but are constantly replaced by others. This scurf, or scaliness, is most conspicuous on the sides and epigastric region. The cuticular lines are somewhat deeper in the patches than on the contiguous parts; but there is no elevated border, or distinguishing boundary between the discoloured part of the skin, and that which retains its natural colour. The discolouration rarely extends over the whole body. It is strongest and fullest round the umbilicus, on the breasts, and sides; it seldom appears in the skin over the sternum, or along the spine of the back. Interstices of proper skin colour are more numerous, and largest at the lower part of the abdomen and back, where the scales are often small, distinct, and a little depressed. The face, nates, and lower extremities are least affected; the patches are found upon the arms, but mostly on the inside, where they are distinct and of different sizes.

The pityriasis versicolor is not a cuticular disease; for when the cuticle is abraded from any of the patches, the sallow colour remains as before in the skin or retemucosum. This singular appearance is not attended with any internal disorder, nor with any troublesome symptom, except a little itching or irritation felt on getting into bed, and after strong exercise, or drinking warm liquors. There is in some cases a slight exanthema, partially distributed among the discoloured patches; and sometimes an appearance like the lichen pilaris; but eruptions of this kind are not permanent, neither do they produce any change in the original form of the complaint. The duration of the pityriasis versicolor is always considerable. Dr. Willan has observed its continuance in some persons for four, five, or six years. It is not limited to any age or sex. Its causes are not pointed out with certainty. Several patients have referred it to fruit taken in too great quantities; some have thought it was produced by eating mushrooms; others by exposure to sudden alterations of cold and heat. In some individuals, who had an irritable skin, and occasionally used violent exercise, the complaint has been produced, or at least much aggravated, by wearing flannel next to the skin. It is likewise often observed in persons who had resided for a length of time in a tropical climate.

Pix a'rida.
Pix Burgu'ndica. } See *Pinus abies*.

Pix li'quida. Tar. See *Pinus sylvestris.*

Place'bo. I will please: an epithet given to any medicine adapted more to please than benefit the patient.

PLACE'NTA. (From *πλακους*, a cake, so called from its resemblance to a cake.) The placenta is a circular, flat, vascular, and apparently fleshy substance, different in its diameter in different subjects, but usually extending about six inches, or upwards, over about one-fourth part of the outside of the ovum in pregnant women. It is more than one inch in thickness in the middle, and becomes gradually thinner towards the circumference from which the membranes are continued. The placenta is the principal medium by which the communication between the parent and child is preserved; but though all have allowed the importance of the office which it performs, there has been a variety of opinions on the nature of that office, and of the manner in which it is executed.

That surface of the placenta which is attached to the uterus by the intervention of the connecting membrane, is lobulated and convex; but the other, which is covered with the amnion and chorion, is concave and smooth, except the little eminences made by the blood-vessels. It is seldom found attached to the same part of the uterus in two successive births; and, though it most frequently adheres to the anterior part, it is occasionally fixed to any other, even to the os uteri, in which state it becomes a cause of a dangerous hæmorrhage at the time of parturition. The placenta is composed of arteries and veins, with a mixture of pulpy or cellular substance. Of these vessels there are two orders, very curiously interwoven with each other. The first is a continuation of those from the funis, which ramify on the internal surface of the placenta, the arteries running over the veins, which is a circumstance peculiar to the placenta; and then, sinking into its substance, anastomose and divide into innumerable small branches. The second order proceeds from the uterus; and these ramify in a similar manner with those from the funis, as appears when a placenta is injected from those of the parent. The veins, in their ramifications, accompany the arteries as in other parts. There have been many different opinions with respect to the manner in which the blood circulates between the parent and child, during its continuance in the uterus. For a long time it was believed that the intercourse between them was uninterrupted, and that the blood propelled by the powers of the parent pervaded, by a continuance of the same force, the vascular system of the fœtus; but repeated attempts having been made, without success, to inject the whole placenta, funis and fœtus, from the vessels of the parent, or any part of the uterus, from the vessels of the funis, it is now generally allowed, that the two systems of vessels in the placenta, one of which may be called maternal, the other fœtal, are distinct. It is also admitted, that the blood of the fœtus is, with regard to its formation, increase, and circulation, unconnected with, and totally independent of the parent; except that the matter by which the blood of the fœtus is formed must be derived from the parent. It is thought that which has probably undergone some preparatory changes in its passage through the uterus, is conducted by the uterine or maternal arteries of the placenta to some cells or small cavities, in which it is deposited: and that some part of it, or something secreted from it, is absorbed by the fœtal veins of the placenta, and by them conveyed to the fœtus for its nutriment. When the blood which circulates in the fœtus requires any alteration in its qualities, or when it has gone through the course of the circulation, it is carried by the arteries of the funis to the placenta, in the cells of which it is deposited, and then absorbed by the maternal veins of the placenta, and conducted to the uterus, whence it may enter the common circulation of the parent. Thus it appears, according to the opinion of Harvey, that the placenta performs the office of a gland, conveying air, or secreting the nutritious juices from the blood brought from the parent by the arteries of the uterus, and carried to the fœtus by the veins of the funis, in a manner probably not unlike to that in which milk is secreted and absorbed from the breasts. The veins in the placenta are mentioned as the absorbents, because no lymphatic vessels have yet been found in the placenta or funis; nor are there any nerves in these parts; so that the only communication hitherto discovered between the parent and child, is by the sanguineous system. The proofs of the manner in which the blood circulates between the parent and child are chiefly drawn from observations made upon the funis. When it was supposed that the child was supplied with blood in a direct stream from the parent, it was asserted that, on the division of the funis, if that part next to the placenta was not secured by a ligature, the parent would be brought into extreme danger by the hæmorrhage which must necessarily follow. But this opinion, which laid the foundation of several peculiarities in the management of the funis and placenta, is proved not to be true: for, if the funis be compressed immediately after the birth of the child, and whilst the circulation in it is going on, the arteries between the part compressed and the child throb violently, but those between the compression and the placenta have no pulsation; but the vein between the part compressed and the placenta swells, and that part next to the fœtus becomes flaccid, but if, under the same circumstances, the funis be divided, and that part next the child be not secured, the child would be in danger of losing its life by the hæmorrhage; yet the mother would suffer no inconvenience if the other part was neglected. It is, moreover, proved, that a woman may die of an hæmorrhage occasioned by a separation of the placenta, and the child be nevertheless born, after her death, in perfect health. But if the placenta be injured, without separation, either by the rupture of the vessels which pass upon its inner surface, or in any other way, the child being deprived of its proper blood, would perish, yet the parent might escape without injury. See also *Secundines.*

Place′ntula. (Dim. of *placenta.*) A small placenta.

Pladaro′tis. (From πλαδαρος, moist, flaccid.) A fungous and flaccid tumour within the eye-lid.

PLANTA′GO. (From *planta*, the sole of the feet; so called from the shape of its leaves, or because its leaves lie upon the ground and are trodden upon.) 1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Monogynia.* The plantain.

2. The pharmacopœial name of the *plantago major.*

Planta′go coro′nopus. *Coronopodium. Cornu cervinum. Stella terræ. Plantago.* Buck's-horn plantain. The *Plantago coronopus*, of Linnæus. Its medical virtues are the same as those of the other plantains.

Planta′go latifo′lia. See *Plantago.*

Planta′go ma′jor. The systematic name of the broad-leaved plantain. *Centinervia. Polyneuron. Plantago latifolia. Plantago major; foliis ovatis glabris, scapo tereti, spica flosculis imbricatis*, of Linnæus. This plant was retained until very lately in the materia medica of the Edinburgh College, in which the leaves are mentioned as the pharmaceutical part of the plant; they have a weak herbaceous smell, an austere, bitterish, subsaline taste; and their qualities are said to be refrigerant, attenuating, substyptic, and diuretic.

Planta′go psy′llium. The systematic name of the branching plantain. *Psyllium. Pulicaris herba. Crystallion* and *cynomoia* of Oribasius. Flea-wort. The seeds of this plant, *Plantago psyllium; caule ramoso herbaceo, foliis subdentatis, recurvatis; capitulis aphyllis*, of Linnæus, have a nauseous mucilaginous taste, and no remarkable smell. The decoction of the seeds is recommended in hoarseness and asperity of the fauces.

Plantain. See *Plantago.*

Plantain-tree. See *Musa paradisiaca.*

PLANTA′RIS. (*Plantaris, sc. musculus.* From *planta*, the sole of the foot, to which it belongs.) *Tibialis gracilis*, vulgo *plantaris*, of Winslow. *Extensor tarsi minor*, vulgo *plantaris*, of Douglas. A muscle of the foot, situated on the leg, that assists the soleus, and pulls the capsular ligament of the knee from between the bones. It is sometimes, though seldom, found wanting on both sides. This long and slender muscle, which is situated under the gastrocnemius externus, arises, by a thin fleshy origin, from the upper and back part of the outer condyle of the os femoris. It adheres to the capsular ligament of the joint, and, after running obliquely downwards and outwards, for the space of three or four inches, along the second origin of the gastrocnemius internus, and under the gastrocnemius externus, terminates in a long, thin, and slender tendon, which adheres to the inside of the tendo Achillis, and is inserted into the inside of the posterior part of the os calcis. This tendon sometimes sends off an aponeurosis that loses itself in the capsular ligament, but it does not at all contribute to form the aponeurosis that is spread over the sole of the foot, as was formerly supposed, and as its name would seem to imply. Its use is to assist the gastrocnemii in extending the foot. It likewise serves to prevent the capsular ligament of the knee from being pinched.

Pla′num os. (*Planus*, soft, smooth; applied to a bone whose surface is smooth or flat.) The papyraceous or orbital portion of the ethmoid bone was formerly so called.

Plaster, ammoniacum. See *Emplastrum ammoniaci.*

Plaster, ammoniacum, with mercury. See *Emplastrum ammoniaci cum hydrargyro.*

Plaster, blistering fly. See *Emplastrum lyttæ.*

Plaster, compound Galbanum. See *Emplastrum Galbani compositum.*

Plaster, compound pitch. See *Emplastrum picis compositum.*

Plaster, cumin. See *Emplastrum cumini.*

Plaster, lead. See *Emplastrum plumbi.*

Plaster, mercurial. See *Emplastrum hydrargyri.*

Plaster of opium. See *Emplastrum opii.*

Plaster, resin. See *Emplastrum resinæ.*

Plaster, soap. See *Emplastrum saponis.*

Plaster, wax. See *Emplastrum ceræ.*

Pla′ta. (From πλατυς, broad.) The shoulder-blade.

PLATER, Felix, was born at Basle in 1536, his father being principal of the College there. He went to complete his medical studies at Montpelier, where he distinguished himself at an early age, and obtained his doctor's degree at 20. He then settled in his native place, and four years after was appointed to the chair of medicine, and became the confidential physician of the princes and nobles of the Upper Rhine. He possessed an extensive knowledge of the branches of science connected with medicine, and contributed much to the reputation of the University, where he continued a teacher upwards of fifty years. He died in 1614, extremely regretted by his countrymen. The following are his principal works: "De Corporis Humani Structura et Usu," in three books; "De Febribus;" "Praxeos Medicæ, tomi tres;" "Observationum Medicinalium, libri tres."

Platia'smus. (From πλατυς, broad.) A defect in the speech in consequence of too broad a mouth.

PLA'TINA. A metal so called. (The name platina was given to this metal by the Spaniards from the word *plata*, which signifies silver in their language, by way of comparison with that metal, whose colour it imitates: or from the river *Plata*, near which it is found.) It exists in nature, only in a metallic state in small grains, combined with iron, copper, plumbago, &c. The largest mass of which we have heard, is one of the size of a pigeon's egg, in the possession of the Royal Society of Bergara. It is found in the parishes of Novita and Citaria, north from Choco in Peru, and near Carthagena in South America. It was unknown in Europe before the year 1748. Don Antonio Ulloa then gave the first information concerning its existence, in the narrative of his voyage with the French academicans to Peru.

Properties. — Platina purified from all extraneous mixture is of a white colour, intermediate between that of silver and tin. It is the hardest of all metals. Its specific gravity being from 20.6 to 23. makes it by far the heaviest body known. It is malleable and ductile, like gold; but to what degree is not yet ascertained. We have seen platina drawn into a wire of a smaller diameter than the two-thousandth part of an inch. It is the most infusible of all the metals. It cannot be melted (in a considerable quantity at least,) by the most violent heat of our furnaces, but may be fused by the heat of a burning lens, or by the assistance of oxygen gas. When pure, its parts may be made to combine or weld, by hammering in a white heat; a property confined to this metal and iron. It suffers no alteration from the action of air; neither water, the earths, nor the salino-terrene substances have any power of re-action upon it. Potash acts upon it at a high temperature. It is not oxydised when exposed red-hot to the air, for a very long time. It may however be oxydised by the galvano-electric spark, and by the nitro-muriatic acid. This acid dissolves it, and assumes first a yellow and afterwards a deep orange colour. The solution tinges animal substances with a dark colour, and may be decomposed by alkalies and by muriate and nitrate of ammonia, which have no effect on solutions of gold. The precipitate which is a triple compound, consisting of ammonia, muriatic acid, and oxyde of platina, may be reduced by the action of a violent heat. No other acid has any action upon platina; but they will combine with its oxyde. Platina combines with phosphorus and sulphur with considerable facility. It unites with the greater number of the metals by fusion. Of these alloys, that with copper is the most valuable, as it is ductile, susceptible of a fine polish, and does not tarnish on exposure to air; the rest of them are very little known.

Method of obtaining Platina. — The processes most commonly employed to obtain pure platina, are as follows:

1. Take equal parts of platina in grains, and acidulous tartrate of potash, put the mixture into a well luted crucible, and expose it for two hours to a violent heat. The platina fuses, but it becomes brittle and whiter than platina is in common; then expose it to a very strong heat under a muffle, by which means all the arsenic combined with it will be disengaged, and the platina remain behind in a malleable state.

2. Platina may likewise be obtained pure; by decomposing the nitro-muriatic solution of common platina, by muriate of ammonia, heating the precipitate intensely, and stamping it when of a white heat into one mass; or, by assisting the fusion with a stream of oxygen gas.

3. Jannetty's process, which is considered as the best, and which is generally used for obtaining malleable platina, is as follows:

Triturate common platina with water, to wash off every contaminating matter that water can carry away. Mix the platina with about one-fifth part of arsenious acid and one-fifteenth part of potash; putting the whole in a proper crucible, in the following manner: having well heated the crucible and the furnace receiving it, put in one-third of the mixture, apply to this a strong heat, and add one-third more: after a renewed application of heat, throw in the last portion. After a thorough fusion of the whole, cool and break the mass. Then fuse it a second time, and, if necessary, even a third time, till it ceases to be magnetic. Break it into small pieces, and melt those pieces in separate crucibles, and in portions of a pound and a half of the platina to each crucible, with an equal quantity of arsenious acid and half a pound of potash. After cooling the contents of the different crucibles in a horizontal position, in order to have them throughout of equal thickness, heat them under a muffle to volatilize the arsenious acid, and maintain them in this state, without increase of heat, for the space of six hours. Heat them, next, in common oil, till the oil shall have evaporated to dryness. Then immerse them in nitric acid, boil them in water, heat them to redness in a crucible, and hammer them into a dense mass. They are now fit to be heated in a naked fire, and hammered into bars for the purposes of commerce.

Mr. Richter directs, in order to purify

platina, and render it malleable, the following process: dissolve platina of commerce in nitro-muriatic acid, and let fall into this solution potash, until a precipitate begins to appear; then add a solution of sulphate of potash, till the whole is precipitated. Wash the precipitate till the water that passes do not change its colour by adding to it prussiate of potash. Dry the precipitate, and mix with it 1.5 times its weight of soda, freed from its water of crystallization; press it into a crucible, but not so as to fill it, heat it gradually, and raise the heat till it fuses.

PLATYCO′RIA. (From πλατυς, broad, and κορη, the pupil of the eye.) An enlarged pupil.

PLATYOPHTHA′LMUM. (From πλατυς, broad, and οφθαλμος, the eye; so called because it is used by women to enlarge the appearance of the eye.) Antimony.

PLATYPHY′LLUM. (From ϖλατυς, broad, and φυλλον, a leaf.) Broad leaved.

PLATY′SMA MYOI′DES. (From πλατυς, broad, μυς, a muscle, and ειδος, resemblance.) *Musculus cutaneus*, of Winslow. *Quadratus genæ vel latissimus colli*, of Douglas. *Latissimus colli*, of Albinus. *Quadratus genæ, seu tetragonus*, of Winslow, and *thoraco maxilli facial*, of Dumas. A thin muscle on the side of the neck, immediately under the skin, that assists in drawing the skin of the cheek downwards; and when the mouth is shut, it draws all that part of the skin to which it is connected below the lower jaw upwards.

PLE′CTANÆ. (From πλεκτω, to fold.) The horns of the uterus.

PLE′CTRUM. (From πληττω, to strike, so named from their resemblance to a drum-stick.) The styloid process of the temporal bone, and the uvula.

PLEMPIUS, VOPISCUS FORTUNATUS, was born at Amsterdam in 1601. He commenced his medical studies at Leyden, then travelled for improvement to Italy, and took his degree at Bologna. He settled as a physician in his native city, and acquired a high reputation there; whence he was invited to a professorship at Louvain, whither he repaired in 1633. He adopted on this occasion the Catholic religion, and took a new degree, in conformity with the rules of the university. He was soon after nominated principal of the college of Breugel. His death happened in 1671. He increased the reputation of Louvain by the extent of his attainments, and distinguished himself in all the public questions, that came under discussion. He was author of many works in Latin and Dutch: in one of which, entitled "Fundamenta, seu Institutiones Medicinæ," he gave a satisfactory proof of his candour, by strenuously advocating the circulation of the blood, of which he had previously expressed doubts.

PLERO′SIS. See *Plethora.*

PLE′SMONE. See *Plethora.*

PLETHO′RA. (From πληθω, to fill.) *Plesmone. Plerosis.* An excessive fulness of vessels, or a redundance of blood.

PLEUMO′NIA. See *Pneumonia.*

PLEU′RA. (Πλευρα.) A membrane which lines the internal surface of the thorax, and covers its viscera. It forms a great process, the mediastinum, which divides the thorax into two cavities. Its use is to render the surface of the thorax moist by the vapour it exhales. The cavity of the thorax is every where lined by this smooth and glistening membrane, which is in reality two distinct portions or bags, which by being applied to each other laterally, form the septum called mediastinum: this divides the cavity into two parts, and is attached posteriorly to the vertebræ of the back; and anteriorly to the sternum. But the two laminæ of which this septum is formed, do not every where adhere to each other; for at the lower part of the thorax they are separated, to afford a lodgment to the heart; and at the upper part of the cavity they receive between them the thymus gland. The pleura is plentifully supplied with arteries and veins from the internal mammary, and the intercostals. Its nerves which are very inconsiderable, are derived chiefly from the dorsal and intercostal nerves. The surface of the pleura, like that of the peritonæum and other membranes lining cavities, is constantly bedewed with a serous moisture, which prevents adhesions of the viscera. The mediastinum, by dividing the breast into two cavities, obviates many inconveniences to which we should otherwise be liable. It prevents the two lobes of the lungs from compressing each other when we lie on one side, and consequently contributes to the freedom of respiration, which is disturbed by the least pressure on the lungs. If the point of a sword penetrates between the ribs into the cavity of the thorax, the lungs on that side cease to perform their office, because the air being admitted through the wound, prevents the dilatation of that lobe, while the other lobe, which is separated from it by the mediastinum, remains unhurt, and continues to perform its functions as usual.

PLEURI′TIS. (From πλευρα, the membrane lining the lungs.) Pleurisy, or inflammation of the pleura. A species of pneumonia, of Cullen. See *Pneumonia.* In some instances the inflammation is partial, or affects one place in particular, which is commonly on the right side; but in general, a morbid affection is communicated throughout its whole extent. The disease is occasioned by exposure to cold, and by all the causes which usually give rise to all inflammatory complaints; and it attacks chiefly those of a vigorous constitution and plethoric habit. In consequence of the previous inflammation, it is apt at its departure to leave behind a thickening of the pleura, or adhesions to the ribs and intercostal muscles, which either lay the foundation of future pneumonic complaints, or render the patient more susceptible of the changes in the state of the atmosphere than before.

It comes on with an acute pain in the side, which is much increased by making a full inspiration, and is accompanied by flushing in the face, increased heat over the whole body, rigors, difficulty of lying on the side affected, together with a cough and nausea, and the pulse is hard, strong, and frequent, and vibrates under the finger when pressed upon, not unlike the tense string of a musical instrument. If blood is drawn and allowed to stand for a short time, it will exhibit a thick sizy or buffy coat on its surface. If the disease be neglected at its onset, and the inflammation proceeds with great violence and rapidity, the lungs themselves becomes affected, the passage of the blood through them is stopped, and the patient is suffocated; or from the combination of the two affections, the inflammation proceeds on to suppuration, and an abscess is formed. The prognostic in pleurisy must be drawn from the severity of the symptoms. If the fever and inflammation have run high, and the pain should cease suddenly, with a change of countenance, and a sinking of the pulse, great danger may be apprehended; but if the heat and other febrile symptoms abate gradually, if respiration is performed with greater ease and less pain, and a free and copious expectoration ensues, a speedy recovery may be expected.

The appearances on dissection are much the same as those mentioned under the head of pneumonia, viz. an inflamed state of the pleura, connected with the lungs, having its surface covered with red vessels, and a layer of coagulated lymph lying upon it, adhesions too, of the substance of the lungs to the pleura. Besides these, the lungs themselves are often found in an inflamed state, with an extravasation either of blood or coagulated lymph in their substance. Tubercles and abscesses are likewise frequently met with. See *Pneumonia*.

Pleurocolle′sis. (From *πλευρα*, the pleura, and *κολλαω*, to adhere.) An adhesion of the pleura to the lungs or some neighbouring part.

PLEURODY′NIA. (From *πλευρα*, and *οδυνη*, pain.) A pain in the side, from a rheumatic affection of the pleura.

Pleuro-pneumo′nia. (From *πλευρα*, and *πνευμονια*, an inflammation of the lungs.) An inflammation of the lungs and pleura.

Pleurorthopnæ′a. (From *πλευρα*, the pleura, *ορθος*, upright, and *πνεω*, to breathe.) A pleurisy in which the patient cannot breathe without keeping his body upright.

PLEUROSTHO′TONOS. (From *πλευρον*, the side, and *τεινω*, to stretch.) A spasmodic disease in which the body is bent to one side.

PLE′XUS. (From *plector*, to plait or knit.) A net-work of vessels. The union of two or more nerves is also called a plexus.

PLE′XUS CARDI′ACUS. The cardiac plexus of nerves is the union of the eighth pair of nerves and great sympathetic.

PLE′XUS CHOROI′DES. The choroid plexus is a net-work of vessels situated in the lateral ventricles of the brain.

PLE′XUS PAMPINIFO′RMIS. The plexus of vessels about the spermatic chord.

PLE′XUS PULMO′NICUS. The pulmonic plexus is formed by the union of the eighth pair of nerves with the great sympathetic.

Ple′xus reticula′ris. A net-work of vessels under the fornix of the brain.

PLI′CA. (From *plico*, to entangle. This disease is commonly distinguished by the adjective *Polonica*, it being almost peculiar to the inhabitants of Poland.) *Helotis. Kolto. Rhopalosis. Plica polonica. Trichoma.* Plaited hair. A disease of the hairs, in which they become long and coarse, and matted and glued into inextricable tangles. It is peculiar to Poland, Lithuania, and Tartary, and generally appears during the autumnal season.

Plica′ria. (From *plico*, to entangle; so called because its leaves are entangled together in one mass.) Wolf's-claw, or club moss.

Pli′nthius. *Πλιντθιος.* The fourfold bandage.

Plum, Malabar. See *Eugenia Jambos.*

Plumba′go. (From *plumbum*, lead; so called because it is covered with lead-coloured spots.) 1. Lead-wort. See *Polygonum persicaria.*

2. An ore of a shining blue-black colour, a greasy feel, and tuberculated when fractured. It is by many erroneously taken for molybdena, from which it is easily distinguished by its fracture, that of the latter being always lamellated.

Plumba′go Europæ′a. The systematic name of the tooth-wort. *Dentaria. Dentillaria.* This plant is to be distinguished from the pellitory of Spain, which is also called dentaria. It is the *Plumbago Europæa; foliis amplexicaulibus, lanceolatis scabris,* of Linnæus. The root was formerly esteemed, prepared in a variety of ways, as a cure for the tooth-ache, arising from caries.

PLU′MBI CARBO′NAS. See *Plumbi subcarbonas.*

Plu′mbi o′xydum semivi′treum. See *Lithargyrus.*

PLU'MBI SUBACETA'TIS LI'QUOR. *Liquor acetatis plumbi.* Solution of acetate of lead, formerly called *aqua lithargyri acetati.* Goulard's extract. "Take of semi-vitrified oxyde of lead, two pounds; acetic acid, a gallon. Mix, and boil down to six pints, constantly stirring; then set it by, that the feculencies may subside, and strain."

It is principally employed, in a diluted state, by surgeons, as a resolvent against inflammatory affections.

PLU'MBI SUBACETA'TIS LI'QUOR DILU'TUS. *Liquor acetatis plumbi dilutus.* Diluted solution of acetate of lead. *Aqua lithargyri acetati composita.* "Take of solution of sub-acetate of lead, a fluid drachm; distilled water, a pint; weak spirit, a fluid drachm. Mix." The virtues of this water, the *aqua vegeto-mineralis* of former pharmacopœias, applied externally, are resolvent, refrigerant, and sedative.

PLU'MBI SUBCARBO'NAS. *Carbonas plumbi.* Subcarbonate of lead commonly called cerusse, or white lead. This article is made in the large way in white lead manufactories, by exposing thin sheets of lead to the vapour of vinegar. The lead is curled up and put into pots of earthenware, in which the vinegar is, in such a way as to rest just above the vinegar. Hundreds of these are arranged together and surrounded with dung, the heat from which volatilizes the acetic acid, which is decomposed by the lead, and an imperfect carbonate of lead is formed, which is of a white colour. This preparation is seldom used in medicine or surgery but for the purpose of making other preparations, as the superacetate. It is sometimes employed medicinally in form of powder and ointment, to children whose skin is fretted. It should however be cautiously used, as there is great reason to believe that complaints of the bowels of children originate from its absorption. See *Pulvis cerussæ compositus.*

PLU'MBI SUPERACE'TAS. *Cerussa acetata.* Formerly called *saccharum saturni,* or sugar of lead, from its sweet taste. It possesses sedative and astringent qualities in a very high degree, and is perhaps the most powerful internal medicine in profuse hæmorrhages, especially combined with opium: but its use is not entirely without hazard, as it has sometimes produced violent colic and palsy; wherefore it is better not to continue it unnecessarily. The dose may be from one to three grains. It has been also recommended to check the expectoration, and colliquative discharges in phthisis, but will probably be only of temporary service. Externally it is often used for the same purposes as the liquor plumbi subacetatis.

PLU'MBUM. See *Lead.*

Plu'mbum can'didum. See *Tin.*

Plu'mbum cine'reum. Bismuth.

Plu'mbum ni'grum. Black lead.

Plu'mbum ru'beum. The philosopher's stone.

Plu'mbum u'stum. Burnt lead.

Plumme'ri pi'lulæ. Plummer's pills. A composition of calomel, antimony, guaiacum and balsam of copaiba. See *Pilulæ hydrargyri submuriatis compositæ.*

Plums. Three sorts of plums are ranked amongst the articles of the materia medica; they are all met with in the gardens of this country, but the shops are supplied with them moderately dried, from abroad. 1. The *pruna brignolensia;* the Brignole plum, or prunelloe, brought from Brignole in Provence; it is of a reddish yellow colour, and has a very grateful, sweet, subacid taste. 2. The *pruna Gallica;* the common or French prune. 3. The *pruna damascena,* or damson. All these fruits possess the same general qualities with the other summer fruits. The prunelloes, in which the sweetness has a greater mixture of acidity than in the other sorts, are used as mild refrigerants in fevers and other hot indispositions. The French prunes and damsons are the most emollient and laxative; they are often taken by themselves to gently move the belly, where there is a tendency to inflammations. Decoctions of them afford a useful basis for laxative or purgative mixtures, and the pulp in substance for electuaries.

Plunket's cancer remedy.—"Take crows' foot, which grows in low grounds, one handful; dog's fennel, three sprigs; both well pounded; crude brimstone in powder, three middling thimbles-full; white arsenic the same quantity; incorporated all in a mortar, and made into small balls the size of a nutmeg, and dried in the sun. These balls must be powdered and mixed with the yolk of an egg, and laid over the sore or cancer upon a piece of pig's bladder, or stripping of a calf when dropped, which must be cut to the size of the sore, and smeared with the yolk of an egg. This must be applied cautiously to the lips or nose lest any part of it get down; nor is it to be laid on too broad on the face, or too near the heart, nor to exceed the breadth of half-a-crown; but elsewhere as far as the sore goes. The plaster must not be stirred until it drops off of itself, which will be in a week. Clean bandages are often to be put on.

PNEUMATIC APPARATUS. The discovery of aëriform fluids has, in modern chemistry, occasioned the necessity of some peculiar instruments, by means of which those substances may, in distillations, solutions, or other operations, be caught, collected, and properly managed. The proper instruments for this are styled the pneumatic apparatus. Any kind of air is specifically lighter than any liquid; and, therefore, if not decomposed by it, rises through it in bubbles. On this principle rests the essential part of the apparatus, adapted to such operations. Its principal part is the pneumatic trough, which is a kind of reservoir for the liquid, through which the gas is conveyed and caused to rise, and is filled either with water or with quicksilver. Some inches below its brim an horizontal shelf is fastened, in dimension about half or the third part of the trough, and in the water-trough this is provided on its foremost edge with a row of holes, into which, from underneath, short-necked funnels are fixed. The trough is filled with water sufficient to cover the shelf, to support the receivers, which being previously filled with water are placed invertedly, their open end turned down upon the above-mentioned holes, through which afterwards the gases, conveyed there and directed by means of the funnels, rise in the form of air-bubles.

In some cases the trough must be filled with quicksilver, because water absorbs or decomposes some kinds of air. The price and specific gravity of that metal make it necessary to give to the quicksilver-trough smaller dimensions. It is either cut in marble, or made of wood well joined. The late Karsten has contrived an apparatus, which, to the advantage of saving room, adds that of great conveniency.

To disengage gases, retorts of glass, either common or tubulated, are employed, and placed in a sand-bath, or heated by a lamp. Earthen, or coated glass retorts, are put in the naked fire. If necessary, they are joined with a metallic or glass-conveying pipe. When, besides the aëriform, other fluids are to be collected, the middle or intermediate bottle finds its use; and to prevent, after cooling, the rising of the water from the trough into the disengaging vessels, the tube of safety is employed. For the extrication of gases taking place in solutions, for which no external heat is required, the bottle called disengaging bottle, or proof, may be used. For receivers, to collect the disengaged airs, various cylinders of glass are used, whether graduated or not, either closed at one end, or open at both; and in this last case, they are made air-tight by a stopper fitted by grinding. Besides these, glass bells and common bottles are employed.

To combine with water, in a commodious way, some gases that are only gradually and slowly absorbed by it, the glass apparatus of Parker is serviceable.

Pneumatoce'le. (From πνευμα, wind, and κηλη, a tumour.) Any species of hernia, that is distended with flatus.

Pneumato'mphalus. (From πνευμα, wind, and ομφαλος, the navel.) A flatulent, umbilical hernia.

PNEUMATO'SIS. (From πνευματοω, to inflate.) *Emphysema.* Windy swelling. A genus of disease in the class, *Cachexiæ*, and order, *Intumescentiæ*, of Cullen, known by a collection of air in the cellular texture under the skin, rendering it tense, elastic, and crepitating. The species of pneumatosis are:

1. *Pneumatosis spontanea,* without any manifest cause.

2. *Pneumatosis traumatica,* from a wound.

3. *Pneumatosis venenata,* from poisons.

4. *Pneumatosis hysterica,* with hysteria.

PNEUMO'NIA. (From πνευμων, a lung.) *Pneumonitis. Peripneumonia. Peripneumonia vera.* Inflammation of the lungs. A genus of disease in the class *Pyrexiæ,* and order *Phlegmasiæ,* of Cullen; characterized by pyrexia, difficult respiration, cough, and a sense of weight and pain in the thorax. The species of pneumonia, according to the above nosologist, are,

1. *Peripneumonia.* The pulse not always hard, but sometimes soft: an obtuse pain in the breast: the respiration always difficult; sometimes the patient cannot breathe, unless in an upright posture; the face swelled, and of a livid colour; the cough for the most part with expectoration, frequently bloody.

2. *Pleuritis.* The pulse hard: a pungent pain in one side, aggravated during the time of inspiration; an uneasiness when lying on one side; a very painful cough, dry in the beginning of the disease, afterwards with expectoration, and frequently bloody. See *Pleuritis.*

With respect to pneumonia, the most general cause of this inflammation, is the application of cold to the body, which gives a check to the perspiration, and determines a great flow of blood to the lungs. It attacks principally those of a robust constitution and plethoric habit, and occurs most frequently in the winter season and spring of the year; but it may arise in either of the other seasons, when there are sudden vicissitudes from heat to cold.

Other causes, such as violent exertions in singing, speaking, or playing on wind instruments, by producing an increased action of the lungs, have been known to occasion peripneumony. Those who have laboured under a former attack of this complaint, are much predisposed to returns of it.

The true peripneumony comes on with an obtuse pain in the chest or side, great difficulty of breathing, (particularly in a recumbent position, or when lying on the side affected,) together with a cough, dryness of the skin, heat, anxiety, and thirst. At the first commencement of the disease the pulse is usually full, strong, hard, and frequent; but in a more advanced stage it is commonly weak, soft, and often irregular. In the beginning, the cough is frequently dry and without expectoration; but in some cases it is moist even from the first, and the matter spit up is various both in colour and consistence, and is often streaked with blood.

If relief is not afforded in time, and the inflammation proceeds with such violence as to endanger suffocation, the vessels of the neck will become turgid and swelled; the face will alter to a purple colour; an effusion of blood will take place into the cellular substance of the lungs, so as to impede the circulation through that organ, and the patient will soon be deprived of life.

If these violent symptoms do not arise, and the proper means for carrying off the inflammation have either been neglected, or have proved ineffectual, although adopted at an early period of the disease, a suppuration may ensue, which event is to be known by frequent slight shiverings, and an abatement of the pain and sense of fullness in the part, and by the patient being able to lie on the side which was affected, without experiencing great uneasiness.

When peripneumony proves fatal, it is generally by an effusion of blood taking place into the cellular texture of the lungs, so as to occasion suffocation, which usually happens between the third and seventh day; but it may likewise prove fatal, by terminating either in suppuration or gangrene.

When it goes off by resolution, some very evident evacuation always attends it; such as a great flow of urine, with a copious sediment, diarrhœa, a sweat diffused over the whole body, or a hæmorrhage from the nose; but the evacuation which most frequently terminates the complaint, and which does it with the greatest effect, is a free and copious expectoration of thick white or yellow matter, slightly streaked with blood, and by this the disease is carried off generally in the course of ten or twelve days.

Our opinion as to the event, is to be drawn from the symptoms which are present. A high degree of fever, attended with delirium, great difficulty of breathing, acute pain, and dry cough, denote great danger; on the contrary, an abatement of the febrile symptoms, and of the difficulty of breathing, and pain, taking place on the coming on of a free expectoration, or the happening of any other critical evacuation, promises fair for the recovery of the patient. A termination of the inflammation in suppuration, is always to be considered as dangerous.

On dissection, the lungs usually appear inflamed, and there is often found an extravasation, either of blood, or of coagulable lymph in their cellular substance. The same appearances likewise present themselves in the cavity of the thorax and within the pericardium. The pleura, connected with the lungs, is also in an inflamed state, having its surface every where crowded with red vessels. Besides these, abscesses are frequently found in the substance of the lungs, as likewise tubercles and adhesions to the ribs are formed. A quantity of purulent matter is often discovered also in the bronchia. In the early period of this disease we may hope, by active measures, to bring about immediate resolution; but when it is more advanced, we must look for a discharge by expectoration, as the means of restoring the part to a healthy state. We should begin by large and free bleeding, not deterred by the obscure pulse sometimes found in peripneumony, carrying this evacuation to faintness, or to the manifest relief of the breathing. In the subsequent use of this measure, we must be guided by the violence of the disease on the one hand, and the strength of the patient on the other; the scrophulous, in particular, cannot bear it to any extent: and it is more especially in the early part of the complaint, that it produces a full and decisive effect. Under doubtful circumstances it will be better to take blood locally, particularly when there are pleuritic symptoms; with which blisters may co-operate. The bowels must be well evacuated in the first instance, and subsequently kept regular: and antimonials may be given with great advantage, combined often with mercurials, to promote the discharges, especially from the skin and lungs. Digitalis is proper also, as lessening the activity of the circulation. The antiphlogistic regimen is to be observed, except that the patient will not bear too free exposure to cold. To quiet the cough demulcents may be of some use, or cooling sialagogues; but where the urgency of the symptoms is lessened by copious depletion, opiates are more to be relied upon; a little syrup of poppy, for instance, swallowed slowly from time to time; or a full dose of opium may be given at night to procure sleep, joined with calomel and antimony, that it may not heat the system; but, on the contrary, assist them in promoting the secretions. Inhaling steam will occasionally assist in bringing about expectoration: or, where there is a wheezing respiration, squill in nauseating, or sometimes even emetic, doses may relieve the patient from the viscid matter collected in the air passages. When the expectoration is copious in the decline of the complaint, tonic medicines, particularly myrrh, with a more nutritious diet, become necessary to support the strength; and the same means will be proper, if it should go on to suppuration. Where adhesions have occurred, or other organic change, though the symptoms may appear trifling, much caution is required to prevent the patient falling into *Phthisis;* on which subject, see the management of that disease: and should serous effusion happen, see *Hydrothorax.*

Pneumopleuri′tis. (From ϖνευμων, the lungs, and ϖλευριτις, an inflammation of the pleura.) An inflammation of the lungs and pleura.

Pniga′lium. (From ϖνιγω, to suffocate.) The night-mare. A disorder in which the patient appears to be suffocated.

Pnix. (From ϖνιγω, to suffocate.) An hysterical sense of suffocation.

PODA′GRA. (From ϖους, the foot, and αγρα, a taking, or seizure.) *Febris podagrica. Arthritis. Dolor podagricus.* The gout. A genus of disease in the Class *Pyrexiæ*, and Order *Phlegmasiæ*, of Cullen; known by pyrexia, pain in the joints, chiefly of the great toe, or at any rate of the hands and feet, returning at intervals: previous to the attack, the functions of the stomach are commonly disturbed. The species are,

1. *Podagra regularis. Arthritis podagra. Arthritis rachialgica. Arthritis Æstiva*, of Sauvages. The regular gout.

2. *Podagra atonica. Arthritis melancholica, hiemalis, chlorotica*, and *asthmatica*, of Sauvages. The atonic gout.

3. *Podagra retrograda.* The retrocedent gout.

4. *Podagra aberrans.* Misplaced or wandering gout. See *Arthritis*.

Podagra′ria. (From *prodagra*, the gout; so called, because it was thought to expel the gout.) Gout-weed. A species of ægopodium.

Podoni′ptrum. (From ϖους, a foot, and νιπτω, to wash or bathe.) A bath for the feet.

Podophy′llum. (From ϖους, a foot, and φυλλον, a leaf; so named from its shape.) A species of wolf's-bane.

Podothe′ca. (From ϖους, a foot, and τιθημι, to put.) A shoe, or stocking. An anatomical preparation, consisting of a kind of shoe of the scarf-kin, with the nails adhering to it, taken from a dead subject.

POISON. *Venenum.* That substance which when applied externally, or taken into the human body, uniformly effects such a derangement in the animal economy as to produce disease, may be defined a poison. It is extremely difficult, however, to give a definition of a poison; and the above is subject to great inaccuracy. Poisons are divided, with respect to the kingdom to which they belong, into animal, vegetable, mineral, and halituous, or aërial.

Poisons, in general, are only deleterious in certain doses; for the most active, in small doses, form the most valuable medicines. There are, nevertheless, certain poisons, which are really such in the smallest quantity, and which are never administered medicinally; as the poison of hydrophobia, or the plague. There are likewise substances which are innocent when taken into the stomach, but which prove deleterious when taken into the lungs, or when applied to an abraded surface; thus carbonic acid is continually swallowed with fermented liquours, and thus the poison of the viper may be taken with impunity; whilst inspiring carbonic acid kills, and the poison of the viper inserted into the flesh, often proves fatal.

Several substances also act as poisons when applied either externally or internally, as arsenic.

When a substance produces disease, not only in mankind, but in all animals, it is distinguished by the term *common poison*, as arsenic, sublimate, &c. whilst that which is poisonous to man only, or to animals, and often to one genus merely, is said to be a *relative poison*; thus aloes are poisonous to dogs and wolves; the phellandrium aquaticum kills horses, whilst oxen devour it greedily, and with impunity. It appears, then, that substances act as poisonous only in regard to their *dose, the part of the body they are applied to*, and the *subject*.

Poisons enter the body in the following ways:

1. Through the œsophagus alone, or with the food.

2. Through the anus by clysters.

3. Through the nostrils.

4. Through the lungs with the air.

5. Through the absorbents of the skin, either whole, ulcerated, cut, or torn.

Poison-oak. See *Rhus toxicodendron*.

Polemo′nium. (From *Polemon*, its inventor.) Wild sage.

Poley-mountain. See *Teucrium*.

Po′lium. (From, ϖολιος, white; so called from its white capillaments.) Poley. Teucrium of Linnæus; of which botanists enumerate several species.

Po′lium cre′ticum. See *Teucrium creticum*.

Po′lium monta′num. See *Teucrium capitatum*.

Po′llex. The thumb, or great-toe.

Polychre′stus. (From ϖολυς, much, and χρηςος, useful.) Having many virtues, or uses. Applied to many medicines from their extensive usefulness.

POLYDI′PSIA. (From ϖολυς, much, and διψη, thirst.) Excessive thirst. A genus of disease in the Class *Locales*, and Order *Dysorexiæ*, of Cullen. It is mostly symptomatic of fever, dropsy, excessive discharges, or poisons.

POLY′GALA. (From ϖολυς, much, and γαλα, milk; so named from the abundance of its milky juice.)

1. The name of a genus of plants in the Linnæan system. Class, *Diadelphia*. Order, *Octandria*.

2. The pharmacopœial name of the Common milk-wort.

Poly′gala ama′ra. This is a remarkably bitter plant, and though not used in this country, promises to be as efficacious as those in greater repute. It has been given freely in phthisis pulmonalis, and, like other remedies, failed in producing a cure: yet, as a palliative, it claims attention. Its virtues are balsamic, demulcent, and corroborant.

Poly'gala se'nega. The systematic name of the rattlesnake milk-wort. *Seneka. Polygala; floribus imberbibus spicatis, caule erecto herbaceo simplicissimo, foliis ovato lanceolatis,* of Linnæus. The root of this plant was formerly much esteemed as a specific against the poison of the rattlesnake, and as an antiphlogistic in pleurisy, pneumonia, &c. but it is now very much laid aside. Its dose is from ten to twenty grains; but when employed, it is generally used in the form of decoction, which, when prepared according to the formula of the Edinburgh Pharmacopœia, may be given every second or third hour.

Poly'gala vulga'ris. The systematic name of the common milk-wort. The root of this plant, *Polygala vulgaris,* of Linnæus, is somewhat similar in taste to that of the seneka, but much weaker. The leaves are very bitter, and a handful of them, infused in wine, is said to be a safe and gentle purge.

Polygona'tum. (From ϖολυς, many, and γονυ, a joint; so named from its numerous joints or knots.) *Sigillum Solomonis.* Solomon's seal. The *Convallaria polygonatum,* of Linnæus.

POLY'GONUM. (From ϖολυς, many, and γονυ, a joint; so named from its numerous joints.) The name of a genus of plants in the Linnæan system. Class, *Octandria.* Order, *Trigynia.* Knot-grass.

Poly'gonum avicula're. The systematic name of the knot-grass. *Centumnodia.* This plant is never used in this country; it is said to be useful in stopping hæmorrhages, diarrhœas, &c.; but little credit is to be given to this account.

Poly'gonum bacci'ferum. A species of equisetum, or horse-tail.

Poly'gonum bisto'rta. The systematic name of the officinal bistort. *Bistorta. Polygonum; caule simplicissimo monostachio, foliis ovatis in petiolum decurrentibus,* of Linnæus. This plant is a native of Britain. Every part manifests a degree of stypticity to the taste, and the root is esteemed to be one of the most powerful of the vegetable astringents, and frequently made use of as such, in disorders proceeding from a laxity and debility of the solids, for restraining alvine fluxes, after due evacuations, and other preternatural discharges both serous and sanguineous. It has been sometimes given in intermitting fevers; and sometimes also, in small doses, as a corroborant and antiseptic, in acute malignant and colliquative fevers; in which intentions Peruvian bark has now deservedly superseded both these and all other adstringents. The common dose of bistort root in substance, is fifteen or twenty grains: in urgent cases it is extended to a drachm. Its astringent matter is totally dissolved both by water and rectified spirits.

Poly'gonum divarica'tum, the systematic name of the eastern buck-wheat plant. The roots, reduced to a coarse meal, are the ordinary food of the Siberians.

Poly'gonum fagopy'rum. The systematic name of the buck-wheat. The grain of this plant constitutes the principal food of the inhabitants of Russia, Germany, and Switzerland.

Poly'gonum hydro'piper. The systematic name of the poor man's pepper. *Hydropiper.* Biting arsmart. Lake-weed. Water-pepper. This plant is very common in our ditches; the leaves have an acrid burning taste, and seem to be nearly of the same nature with those of the arum. They have been recommended as possessing antiseptic, aperient, diuretic virtues, and given in scurvies and cachexies, asthmas, hypocondriacal and nephritic complaints, and wandering gout. The fresh leaves have been applied externally, as a stimulating cataplasm.

Poly'gonum latifo'lium. Common knot-grass.

Poly'gonum mas. Common knot-grass.

Poly'gonum mi'nus. Rupture-wort.

Poly'gonum persica'ria. The systematic name of the *Persicaria* of the old pharmacopœias. *Persicaria mitis. Plumbago.* Arsmart. This plant, *Polygonum persicaria,* of Linnæus, is said to possess vulnerary and antiseptic properties; with which intentions it is given in wine to restrain the progress of gangrene.

Poly'gonum selenoi'des. Parsley breakstone.

POLYPO'DIUM. (From ϖολυς, many, and πους, a foot; so called because it has many roots.) The name of a genus of plants in the Linnæan system. Class, *Cryptogamia.* Order, *Filices.* Fern, or polypody.

Polypo'dium aculea'tum. *Filix aculeata.* Spear-pointed fern.

Polypo'dium fi'lix mas. *Aspidium filix mas,* of Dr. Smith. *Pteris. Blancnon Oribasii. Lonchitis.* Male polypody, or fern. *Polypodium filix mas,* of Linnæus. The root of this plant has lately been greatly celebrated for its effects upon the *tænia osculis superficialibus,* or broad tape-worm. Madame Noufer acquired great celebrity by employing it as a specific. This secret was thought of such importance by some of the principal physicians at Paris, who were deputed to make a complete trial of its efficacy, that it was purchased by the French king, and afterwards published by his order. The method of cure is the following:—After the patient has been prepared by an emollient glyster, and a supper of panada, with butter and salt, he is directed to take in the morning, while in bed, a dose of two or three drachms of the powdered root of the male fern. The powder must be washed down with a draught of water, and, two hours after, a strong cathartic, composed of calomel and scammony, is to be given, proportioned to the strength of the patient. If this does not operate in due time, it is to be followed by a dose of purging salts, and if the worm be not expelled in a few hours, this process is to be repeated at proper intervals. Of the success of this, or a similar mode of treatment, in cases of tænia, there can be no doubt, as many proofs in this country afford sufficient testimony; but whether the fern-root or the strong cathartic is the principal agent in the destruction of the worm, may admit of a question; and the latter opinion, Dr. Woodville believes is the more generally adopted by physicians. It appears, however, from some experiments made in Germany, that the tænia has, in several instances been expelled by the repeated exhibition of the root, without the assistance of any purgative.

PO'LYPUS. (From ϖολυς, many, and ϖους, a foot, from its sending off many ramifications, like legs.)

1. The name of a genus of zoophytes.

2. In Cullen's Nosology, a synonym with *sarcoma*. A kind of tumour, which is generally narrow where it originates, and then becomes wider, somewhat like a pear; which most commonly is met with in the nose, uterus, or vagina; and which received its name from an erroneous idea, that it usually had several roots, or feet, like polypi, or zoophytes.

Polypi vary from each other according to the different causes that produce them, and the alterations that happen in them. Sometimes a polypus of the nose is owing to a swelling of the pituitary membrane, which swelling may possess a greater or less space of the membrane, as also its cellular substance, and may affect either one or both nostrils. At other times, it arises from an ulcer produced by a caries of some of the bones which form the internal surface of the nostrils. Polypuses are sometimes so soft, that upon the least touch they are lacerated, and bleed; at other times they are very compact, and even scirrhous. Some continue small a great while; others increase so fast as, in a short time, to push out at the nostrils, or extend backwards towards the throat. Le Dran mentions, that he has known them fill up the space behind the uvula, and, turning towards the mouth, have protruded the fleshy arch of the palate so far forwards as to make it parallel with the third *dentes molares*. There are others which, though at first free from any malignant disposition, become afterwards carcinomatous, and even highly cancerous. Of whatever nature the polypus is, it intercepts the passage of the air through the nostril, and, when large, forces the *septum narium* into the other nostril, so that the patient is unable to breathe, unless through the mouth. A large *polypus* pressing in like manner upon the spongy bones, gradually forces them down upon the maxillary bones, and thus compresses and stops up the orifice of the *ductus lachrymalis*; nor is it impossible for the sides of the *canalis nasalis* to be pressed together. In which case the tears, having no passage through the nose, the eye is kept constantly watering, and the *sacchus lachrymalis*, not being able to discharge its contents, is sometimes so much dilated as to form what is called a flat *fistula*. The above writer has seen instances of polypuses so much enlarged as to force down the ossa palati.

The polypus of the uterus is of three kinds, in respect to situation. It either grows from the fundus, the inside of the cervix, or from the lower edge of the os uteri. The first case is the most frequent, the last the most uncommon. Polypi of the uterus are always shaped like a pear, and have a thin pedicle. They are almost invariably of that species which is denominated fleshy, hardly ever being schirrous, cancerous or ulcerated.

The coagulated substance which is found in the cavities of the heart of those who are some time *in articulo mortis*, is improperly called a polypus.

POLYSA'RCIA. (From ϖολυς, much, and σαρξ, flesh.) *Polysomatia. Obesitas. Corpulentia. Steatites*, of Vogel. Troublesome corpulency, or fatness. A genus of disease in the Class *Cachexiæ*, and Order *Intumescentiæ*, of Cullen.

POLYSOMA'TIA. (From ϖολυς, much, and σωμα, a body.) See *Polysarcia*.

POLYSPA'STUM. (From ϖολυς, much, and σπαω, to draw.) A forcible instrument for reducing luxations.

POLYTRI'CHUM. (From ϖολυς, many, and θριξ, hair; so called from its resemblance to a woman's hair, or because, in antient times, women used to dye the hair with it, to keep it from shedding.) *Polytricon*.

1. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Musci*.

2. The pharmacopœial name of the golden maidenhair.

POLYTRI'CHUM COMMU'NE. The systematic name of the golden maidenhair. *Adianthum aureum*. It possesses, in an inferior degree, astringent virtues: and was formerly given in diseases of the lungs and calculous complaints.

POLYU'RICA ISCHU'RIA. (From ϖολυς, much, and ουρον, urine.) Ischury, from long retention of urine.

POMA'CEUM. (From *pomum*, an apple.) Cider, or the fermented juice of apple.

Pomegranate. See *Punica granatum*.

Pompholygo'des. (From ϖομφολυξ, a bubble, and ειδος, resemblance.) Urine, with bubbles on the surface.

Po'mpholyx. (From ϖομφος, a bladder.)

1. A bubble.

2. The whitish powder, or oxyde of zinc, which adheres to the covers of the crucibles in making brass, in the form of small bubbles.

Po'mphos. (From ϖεμφω, to put forth.) A bladder, or watery pustule.

PO'MUM. An apple. See *Pyrus malus*.

PO'MUM ADA'MI. (*Pomum*, an apple; so called in consequence of a whimsical supposition that part of the forbidden apple which Adam eat, stuck in the throat, and thus became the cause.) The protuberance in the anterior part of the neck, formed by the forepart of the thyroid cartilage.

Po'mum amo'ris. A name for the solanum lycopersicum.

PO'NS VARO'LII. *Corpus annulare. Processus annularis. Eminentia annularis.* Varolius's bridge. An eminence of the medulla oblongata, first described by Varolius. It is formed by the two exterior crura of the cerebellum becoming flattened and passing over the crura of the cerebrum.

Po'ntica vi'na. Acid, feculent, and tartarous wines.

Po'nticum mel. A sort of poisonous honey.

Poorman's pepper. See *Polygonum hydropiper*, and *Lepidium*.

Poplar. See *Populus*.

PO'PLES. *Ignye. Ignys.* The ham, or joint of the knee.

POPLITEAL ARTERY. (*Arteria poplitea*; from *poples*, the ham.) The continuation of the crural artery, through the hollow of the ham.

POPLITE'US. (*Popliteus musculus*, from *poples*, the ham.) A small triangular muscle lying across the back part of the knee-joint.

Poppy, red corn. See *Papaver rhœas.*

Poppy, white. See *Papaver somniferum.*

Popula'go. (From *populus*, the poplar; because its leaves resemble those of the poplar.) Marsh marigold.

PO'PULUS. (From ϖολυς, many; because of the multitude of its shoots.) 1. The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Octandria*.

2. The pharmacopœial name of the *Populus nigra*, of Linnæus, the black poplar; called also *Ægeiros*. The young buds, *oculi*, or rudiments of the leaves, which appear in the beginning of the spring, were formerly employed in an officinal ointment. At present they are almost entirely disregarded, though they should seem, from their sensible qualities, to be applicable to purposes of some importance. They have a yellow, unctuous, odorous, balsamic juice.

Po'pulus balsami'fera. See *Fagara.*

Po'pulus ni'gra. The systematic name of the black poplar. See *Populus.*

Po'rcus. A name for the pudendum muliebre.

PO'RI BILIA'RII. The biliary pores or ducts, that receive the bile from the penicilli of the liver, and convey it to the hepatic duct. See *Liver.*

Poroce'le. (From ϖωρος, a callus, and κηλη, a tumour.) A hard tumour of the testicle.

Poro'mphalum. (From ϖωρος, a callus, and ομφαλος, the navel.) A hard tumour of the navel.

PORRI'GO. (*A porrigendo*, from its spreading abroad.) A disease very common among children, in which the skin of the hairy part of the head becomes dry and callous, and comes off like bran upon combing the head.

PO'RRUM. Porret, or common leek. See *Allium porrum.*

PO'RTA. (*A portando*, because through it the blood is carried to the liver.) That part of the liver where its vessels enter.

Po'rtæ ve'na. See *Vena portæ.*

Portaiguille. The acutenaculum.

PO'RTIO DU'RA. (One branch of the seventh pair of nerves is called *portio dura*, the hard portion, either from its being more firm than the other, or because it runs into the hard part of the skull; and the other the *portio mollis*, or soft portion.) Facial nerve. This nerve arises near the pons, from the crus of the brain, enters the petrous portion of the temporal bone, gives off a branch into the tympanum, which is called the chorda tympani, and then proceeds to form the *pes anserinus* on the face, from whence the integuments of the face are supplied with nerves. See *Facial nerve.*

PO'RTIO MO'LLIS. Auditory nerve. This nerve arises from the medulla oblongata and fourth ventricle of the brain, enters the petrous portion of the temporal bone, and is distributed on the internal ear, by innumerable branches, not only to the cochlea, but also to the membrane lining the vestibulum and semicircular canals, and is the immediate organ of hearing.

Portland powder. A celebrated gout remedy. It consists of various bitters; principally of horehound, birthwort, the tops and leaves of germander, ground-pine, and centaury, dried, powdered, and sifted. It is now fallen into disuse.

Portora'rium. (From *porta*, a door; because it is, as it were, the door or entrance of the intestines.) The right orifice of the stomach.

PORTULA'CA. (From *porto*, to

carry, and *lac*, milk; because it increases the animal milk.) 1. The name of a genus of plants in the Linnæan system. Class, *Dodecandria*. Order, *Digynia*.

2. The pharmacopœial name of the purslane. *Andrachne*. *Allium gallicum*. The plant which is so called in dietetical and medical writings, is the *Portulaca oleracea*, of Linnæus; it abounds with a watery and somewhat acid juice, and is often put into soups, or pickled with spices. It is said to be antiseptic and aperient.

Portula′ca olera′cea. The systematic name of the eatable purslane. See *Portulaca*.

PO′RUS. A pore, or duct.

Po′sca. Vinegar and water mixed.

Posse′tum. Posset. Milk curdled with wine, treacle, or any acid.

Post brachia′le. (From *post*, after, and *brachium*, the arm.) The metacarpus.

POSTE′RIOR ANNULA′RIS. (*Musculus posterior annularis.*) An external interosseal muscle of the hand, that extends and draws the ring-finger inwards.

POSTE′RIOR AU′RIS. See *Retrahentes auris*.

POSTE′RIOR I′NDICIS. (*Musculus posterior indicis.*) An internal interosseal muscle of the hand, that extends the fore-finger obliquely, and draws it outwards.

POSTE′RIOR ME′DII. An external interosseal muscle of the hand, that extends the middle finger, and draws it outwards.

POTAMOGEI′TON. (From ϖοταμος, a river, and γειτων, adjacent; so named because it grows about rivers.) The name of a genus of plants in the Linnæan system. Class, *Tetrandria*. Order, *Tetragynia*.

Potash, acetate of. See *Potassæ acetas*.

Potash, carbonate of. See *Potassæ carbonas*.

Potash, fused. See *Potassa fusa*.

Potash, solution of. See *Potassæ liquor*.

Potash, subcarbonate of. See *Potassæ subcarbonas*.

Potash, subcarbonate of, solution of. See *Potassæ subcarbonatis liquor*.

Potash, sulphate of. See *Potassæ sulphas*.

Potash, sulphuret of. See *Potassæ sulphuretum*.

Potash, super-sulphate of. See *Potassæ super-sulphas*.

Potash, supertartrate of. See *Tartarum*.

Potash, tartrate of. See *Potassæ tartras*.

Potash, with lime. See *Potassa cum calce*.

Potash. See *Potassa*.

POTA′SSA. (So called from the pots, or vessels, in which it was first made.) Potash. *Kali*. Vegetable alkali. This alkali may be obtained from several substances.

1. By evaporating the lixivium of the ashes of wood and other parts of plants. This is calcined, and so disengaged from all the blackening principles, when it is commonly termed *Pearl-ash*; and in the pharmacopœia *Potassa impura*.

The ashes are more or less rich in alkali, according to the nature of the wood which affords them. In general, hard woods contain the most. The ashes of beech afford from 11 to 13lb. per quintal, according to the experiments which have been made, in the large way; those of box afforded from 12 to 14lb. Wormwood affords a good quantity.

To extract this alkali, nothing more is necessary than to wash the ashes, and to concentrate the solution in boilers of cast iron. It is on account of the alkali that wood-ashes are employed in the lixiviums used by laundresses, or bleachers. The use of alkali, in this case, is to combine with the fat substances, and to render them soluble in water.

Almost all the pot-ash sold in commerce for the use of our glass-houses, our soap-makers, our bleaching-grounds, &c. is fabricated in the north, where the abundance of wood admits of its being applied to this single purpose.

2. The lees of wine are almost totally converted into this alkali by combustion. This salt is called *cendres gravelées*; it has almost always a greenish colour, and is considered as very pure.

3. The combustion of tartar of wine likewise affords an alkali of considerable purity. It is usually burned wrapped up in paper, in small packets, which are dipped in water, and afterwards exposed upon burning coals. In order to purify it, the residue of the combustion is dissolved in water, the solution concentrated by fire, the foreign salts separated in proportion as they precipitate, and a very pure alkali is at last obtained, which is known by the name of *salt of tartar*. To procure salt of tartar more speedily, as well as more economically, a mixture of equal parts of nitrate of pot-ash, or common nitre, and tartar, may be burned. The residue, after lixiviation affords a beautiful salt of tartar. Salt of tartar is the form of this alkali most commonly employed for medical uses.

4. If salt-petre be fused upon charcoal, the nitric acid is decomposed and dissipated, while the alkali remains behind; this is called extemporaneous alkali.

When the salt has been brought to a considerable degree of purity, it attracts the humidity of the air, and is resolved into a liquor. In this state it is known by the very improper name of *Oil of tartar per deliquium*.

From all these salts, which are impure and imperfect carbonates of potash, the pure alkali may be extracted.

Methods of obtaining pure Potash.—It has long been a desideratum with chemists to possess a method of preparing potash in a state of absolute purity; the strong tendency which it has to combination, renders this extremely difficult. The following are the methods now made use of.

1. Bouillon la Grange's apparatus consists of several boxes of common deal. At the bottom put river-sand, which must be well washed, and over it add another stratum, but of a finer kind, and cover the whole with a cloth, besprinkled with wood-ashes. In the bottom of each box a hole is made, into which is fitted a glass tube, for the purpose of affording a passage to the liquor as it filters through the sand.

Having arranged the apparatus in this manner, take equal parts of quick lime and pot-ash of commerce, if the lime is very caustic; but in the contrary case, it requires twenty parts of lime to fifteen of potash: put water into an iron kettle, bring it nearly to a state of ebullition, and then add the lime, which, by its slaking, will bring the water to that state completely. When it is slaked, mix the pot-ash, and form of the whole a thick liquid, which must be suffered to cool a little. Then pour the mixture into the boxes, and immediately throw water over it; but, to prevent the water from making holes, when added, place over the mixture a small board, which will rise with the water.

Care must be taken to place earthen pans or other vessels, to receive the liquor which runs through the tubes; and, that the ley may not absorb carbonic acid from the atmosphere, the vessels must be closed with care, in such a manner as to exclude the external air. It will be necessary also to keep water always over the mixture, which must be collected till it passes tasteless from the tubes.

The liquors obtained are nearly of the same degree of strength till towards the end of the process; when they grow weak suddenly.

To evaporate the water, use should be made of cast-iron pots, beginning with the last portions, which are a little weaker; and to prevent the necessity of keeping the strongest a long time in contact with the air when boiling, a strong ebullition is requisite. When the fluid is concentrated to a certain degree, any sulphate of potash that may be present will crystallize, and be precipitated.

To obtain dry potash, pour the concentrated liquor into a small basin, and proceed with the evaporation, till a little of it, poured on an iron plate, or a marble slab, becomes solid.

Then put the concrete potash into a jar, and pour over it very strong alcohol; the potash alone dissolves in it; the sulphate and muriate of potash, with the portions of earth and even of potash united to carbonic acid, which it obstinately retains, or which it may have acquired from the air during the evaporation, remain at the bottom of the solution. Afterwards decant the pure liquor, and distil it in a retort till it becomes colourless. It must then be evaporated in a silver basin. On cooling, it crystallizes in white laminæ, which are sometimes three-tenths of an inch in length; or, instead of suffering it to crystallize, it may be evaporated to dryness.

2. Lowitz has given another method. According to this chemist, the whole of the operation for obtaining potash of the greatest purity, and without the least colour, consists in this: A lixivium of potash, freed from carbonic acid in the usual manner, is evaporated till covered with a thick pellicle. After the cooling, the foreign salt which has crystallized is to be separated, and the evaporation of the lixivium continued in an iron-pot. During this second evaporation, the pellicle of foreign salts, particularly of carbonate of potash, which continues to be formed, must be carefully taken off with an iron skimmer. When no more pellicle is formed, and the matter ceases to boil up, it is removed from the fire, and suffered to cool, continually stirred with an iron spatula. It is then to be dissolved in double the quantity of cold water, and the solution filtered, and evaporated in a glass retort, till it begins to deposit regular crystals. If the mass should consolidate ever so little by cooling, a small quantity of water is to be added, and it must be heated again to render it fluid. After the formation of a sufficient quantity of regular crystals, the fluid, which is very brown, is to be decanted, and the salt, after being suffered to drain, must be re-dissolved in the same quantity of water. The decanted fluid must be kept in a well-closed bottle, and suffered to become clear by subsiding during several days. It must then be decanted for a second evaporation and crystallization. The process must be continued as long as the crystals afford, with the least possible quantity of water, solutions perfectly limpid. These solutions are to be preserved in well-closed bottles, to defend them from the access of air.

The greatest difficulty of this process arises from the facility with which the fluid assumes a solid form. To obviate this inconvenience, a small portion of it may be concentrated to the point at which it becomes converted into a solid mass by cooling. The saturation of a lixivium considerably evaporated, may be ascertained by throwing small pieces of this mass into it during its cooling. When these are no longer dissolved, it is a proof that it is at the required point.

With regard to the foreign salts which are mixed with the potash, the greatest portion separates by crystallization, after the first evaporation. The rest is separated during the second concentration, by the continual skimming of the pellicle. The little which may remain with the potash must precipitate for want of water of solution, in a lixivium, wherein the alkali itself is no longer dissolved but by its own water of crystallization.

Remarks.—The property of alkalies, to dissolve in highly rectified alkohol, with the exclusion of every foreign salt, would afford an excellent means of obtaining potash very pure, if their mutual action did not afford a new source of impurity. For when an alkali, absolutely pure and crystallized, is dissolved in spirit of wine, even without heat, the fluid assumes a very brown colour, which becomes still deeper after being decanted from the saline mass.

The crystallization of potash is very different, accordingly as the crystals are formed with cold or heat. In the first case, the crystals obtained are octahedra in groups, which contain 0.43 water of crystallization, and excite, by their solution in water, even in the summer, a degree of cold very near the point of aqueous congelation. In the second case, very thin crystalline transparent blades of extraordinary magnitude are formed, which, by an assemblage of lines crossing each other in infinite directions, present an aggregate of cells or cavities, most commonly so perfectly closed that the vessel may be inverted without the escape of the smallest drop of lixivium, though sometimes included to the amount of an ounce or two. For this reason, it is necessary to break this fine crystallization that the fluid may run off. The crystals present, in their regular formation, rectangular tetragonal blades, which, as they contain little water of crystallization, produce a considerable degree of heat when dissolved in water.

By exposing such alkaline crystals to a red heat, in a silver crucible, they become fused; and, after cooling, afford a mass as white as snow, extremely caustic, and deliquescent.

As the crystals and the lixivium, during the length of time required to drain the salt, may frequently become charged with a portion of carbonic acid, it is advisable, in order to avoid this inconvenience as much as possible, that the lixivium, as soon as it is brought to the requisite point of concentration, should be poured into a narrow-necked bottle, and well closed therein to crystallize. After the crystals are formed, the bottle is to be reversed without opening, and kept in a temperature rather warm until the crystals are well dried. During the winter, the liquor, after the first crystallization, continues to crystallize without being submitted to a new evaporation, provided only that it be exposed to a temperature somewhat colder than that wherein the first crystals were formed.

Properties of pure Pot-ash.—Pot-ash, in a crystallized form, consists of soft, quadrangular, compressed prisms, which are extremely caustic and deliquescent. It dissolves all soft animal matters when brought into contact with it. It liquefies by a gentle heat, and rises in fumes at high temperatures. It does not unite in a direct manner with phosphorus. It easily combines with sulphur and many of the metallic oxids. It dissolves alumine in the humid way, and even a small quantity of silex; but it does not act on glucine, or zircon, nor on magnesia, or lime. It contracts no union with barytes. It absorbs water and carbonic acid rapidly. It fuses into glass with silex, by the aid of fire. It combines with the acids, and forms salts, which in general do not yield their acid unless to barytes. It changes blue vegetable colours green, and possesses all the general properties of alkalies.

Decomposition of Potassa.

Potassa, from its analogy to ammonia, has often been conjectured to be a compound body; but nothing satisfactory had ever been proved. Its decomposition, however, has since been effected by the labours of Sir Humphry Davy, and the discovery of its constituents will ever be regarded as the most important in chemistry. Sir H. Davy was led to institute experiments, with a view to decompose the fixed alkalies by his previous discovery, that, by the powers of galvanism, the principles of bodies were separated, according to a certain law, some being attracted to the one galvanic pole, others to the other; and that the strength of these attracting forces are proportional to the energies of the opposite electricities in the galvanic circle, and to the conducting power and the degree of concentration of the substances submitted to their action.

In his first attempts, he exposed the alkali, dissolved in water, to the action of the galvanic battery, but the water alone of the solution was decomposed. Potassa, in fusion, was then placed in the galvanic circuit; a vivid light, and appearances of the production of combustible matter were observed; on submitting the solid alkali, rendered a conductor of electricity by being very slightly moistened, to the galvanic action, these appearances were still better marked; and it was in this way that he succeeded in effecting the complete decomposition.

" A small piece of pure potash, which had been exposed a few seconds to the atmosphere, so as to give conducting power to the surface, was placed upon an insulated disc of platina, connected with the negative side of the battery in a state of intense activity; and a platina wire, communicating with the positive side, was brought in contact with the upper surface of the alkali. Under these circumstances a vivid action was observed to take place. The potash began to fuse at both its points of electrization. There was a violent effervescence at its upper surface; at the lower, or negative surface, there was no liberation of elastic fluid; but small globules, having a high metallic lustre, and being precisely similar in visible characters to quicksilver, appeared; some of which burnt, with an explosion and bright flame, as soon as they were formed, and others remained, and were merely tarnished, and finally covered with a white film, which formed on their surfaces. These globules, numerous experiments soon showed to be the substance I was in search of, and a peculiar inflammable principle the basis of potash."

The platina, Sir H. Davy found, had no share in its production; as it was equally produced when other metals, and even charcoal, were used for completing the electrical circuit. The phenomena too were quite independent of the presence of air.

As, in the decomposition of compound substances by galvanism, Sir H. Davy had found that when combustible bases had been developed at the negative side, oxygen is evolved at the positive side, it was reasonable to conclude that this happened in the above experiment, and that the effervesence observed at the part of the potassa in immediate contact with the positive wire, was due to the disengagement of oxygen gas. He accordingly found, performing the experiments in glass tubes, so as to collect the aërial product given out at the positive surface, that this, on the most delicate examination, proved to be pure oxygen; and, unless an excess of water was present, no gas was evolved from the negative surface, nothing being produced there but the inflammable globules.

By these analytic experiments, therefore, potassa is proved to be a compound of a peculiar substance, highly inflammable, and having a metallic lustre, with oxygen. And this he soon confirmed, by synthetic experiments.

He found that the metallic lustre of this inflammable substance immediately became destroyed in the atmosphere, and a white crust formed upon it which was pure potassa. This was soon dissolved by attracting humidity from the air; a new quantity was formed on the surface, until the whole disappeared, and had formed a saturated alkaline solution. When the globules were placed in tubes containing atmospheric air, or oxygen gas, an absorption of oxygen took place, and a crust of alkali was formed. When they were strongly heated, confined in given portions of oxygen, a rapid combustion, with a brilliant white flame, was produced, and they were converted into a white and solid mass, which was found to be potassa; oxygen was absorbed, and nothing emitted which affected the purity of the residual air. From subsequent experiments, Sir H. Davy endeavoured to determine the proportions of these elements. From the products of the combustion of the base, compared with the quantity of oxygen absorbed, he inferred, taking the mean of two experiments, that potassa consists of 86.1. of base, and 13.9 of oxygen. From the results of the decomposition of water by the base, the proportions indicated were 84 of base and 16 of oxygen. The mean of these will be very nearly 85 and 15.

The decomposition of potassa may be effected, without difficulty, with a galvanic battery of not very high powers. One of 100 plates, of six inches square, is sufficient.

An important confirmation of the discovery is that which has been received from an experiment performed by Gay Lussac and Thenard. It occurred to these chemists, that potassa might be decomposed by causing a substance to act on it having a strong attraction for oxygen. They put clean iron filings into a gun-barrel, bent so that the filings in the curvature could be raised to a sufficient heat, by the barrel being placed across a furnace. With one extremity of it, a tube is connected containing solid potassa. When the iron filings in the barrel are brought to a white heat, the alkali in the tube which has been previously kept cold [by a freezing mixture, is melted by applying heat to it by a portable furnace; and it is allowed to run through, by a small aperture, upon the iron filings. It suffers decomposition, the iron attracts its oxygen, and the inflammable base is sublimed to the other end of the tube, which is kept cold, so as to condense it; a tube of safety, containing a little mercury, being connected with the extremity, to allow of the disengagement of any aërial matter, and at the same time exclude the air. Hydrogen gas is disengaged during the process, which appears to be derived from the decomposition of water contained in the alkali, and the result is most successful when the alkali is in the driest state. The base of the alkali is obtained in the form of brilliant laminæ, adhering to the inside of the gun-barrel. There is also found in the curvature where the filings were contained, an alloy of it with iron. According to Sir H. Davy, who performed the experiment with success, the base thus obtained is rather heavier than that procured by electricity, probably from containing a little iron.

To the matter discovered by these researches, as the base of potassa, Sir H. Davy has given the name of

POTASSIUM;

the termination of this name being that assigned to metals, and this substance being presumed to be metallic.

Potassium, at the temperature of 60° of Fahrenheit, appears in the form of small globules, possessing the metallic lustre and opacity, and having the general appearance of quicksilver, so that by the eye it is not easy to distinguish between them. At this temperature, however, it is rather imperfectly fluid, so that it does not easily recover its globular form. At 70° it is more liquid and mobile; and at the temperature of 100° is so completely so, that different globules can be easily run into one. At 50° it becomes a soft and malleable solid, which has the lustre of polished silver, and at 32° it becomes harder and brittle, displaying, when broken, a crystallized texture. Though so fusible, it is not very volatile, but requires a temperature approaching a red-heat to convert it into vapour. It condenses unchanged. It is a perfect conductor of electricity, and is also an excellent conductor of heat.

It is lighter than alkohol, or ether. Sir H. Davy found that it did not even sink in naptha twice distilled, the specific gravity of which was about 770. Its specific gravity he estimates, compared with that of water, is as 6 to 10, at 62° of Fahrenheit. In its solid form it is rather heavier, but still, when cooled to 40°, it swims in distilled naphtha.

Its chemical relations are not less singular than its physical properties.

It combines with oxygen slowly and without flame, at all temperatures below that of its volatilization; but, at this temperature, combustion of it takes place, the heat is intense, and the light white and vivid. It appears to combine with different proportions of oxygen, according to circumstances. Potassium inflames in other gases which can afford oxygen, as the oxymuriatic acid gas. It is so liable to oxygenation, that it is difficult to preserve it unchanged; the best method is to keep it in naphtha; for, although it does not sink in that fluid, it is enveloped by a film of it, which protects it from the action of the air.

When heated in hydrogen gas, at a degree below its point of vaporization, it diminishes in volume, and the gas explodes with the production of alkaline fumes, when it is allowed to pass into the air, a portion of the potassium appears, therefore, to have been dissolved; but, by cooling, this is in a great measure deposited, as the gas loses its property of detonating, spontaneously.

Potassium, when brought into contact with water, decomposes it with great violence, an explosion is produced, with flame, and potassa is formed. Placed on ice, it instantly burns with a bright flame, melting the ice. So strong is the action of this substance on water, that it discovers, by the decomposition is produces, the smallest quantity of water in other liquids, as in alkohol, or in ether. Potassium, thrown into solutions of the mineral acids, inflames and burns on the surface, and the compound of potassa, with the acid employed, is formed.

Potassium combines with the primary inflammables. When brought in contact with phosphorus, under exposure to air, both bodies become fluid, burn, and phosphate of potash is formed. When the experiment is made under naphtha, so as to exclude the air, they combine, and form a compound less fusible than either of its ingredients. It has the lustre of polished lead.

When potassium is brought in contact with sulphur in fusion, under the vapour of naphtha, they combine rapidly with the evolution of heat and light, and a grey substance, in appearance like sulphuret of iron, is formed, a little sulphuretted hydrogen being evolved. When the union is effected in the atmosphere, inflammation takes place.

With the metals, potassium enters readily into combination. With mercury it produces some singular results. When one part of it is added to eight or ten parts of mercury in volume, at 60° Fahrenheit, they constantly unite and form a substance exactly like mercury in colour, but which has less coherence; for small portions of it appear like flattened spheres. When a globule is made to touch a globule about twice as large, they combine with considerable heat; the compound is fluid at the temperature of its formation; but, when cold, it appears as a solid metal, similar in colour to silver. If the quantity of the basis of potassa is still further increased, so as to be about one-thirtieth the weight of mercury, the amalgam increases in hardness, and becomes brittle. The solid amalgam, in which the basis is in the smallest proportion, seems to consist of about one part in weight of base, and seventy parts of mercury, and is very soft and malleable.

When these compounds are exposed to air, they rapidly absorb oxygen; potassa, which deliquesces, is formed, and, in a few minutes, the mercury is found pure and unaltered. When a globule of the amalgam is thrown into water, it rapidly decomposes it, with a hissing noise; potassa is formed, pure hydrogen is disengaged, and the mercury remains free.

The fluid amalgam of mercury and potassium dissolves all the metals; and, in this state of union, mercury acts on platina and iron.

When potassium is heated with gold, or silver, or copper, in a close vessel of pure glass, it rapidly acts upon them; and when the compounds are thrown into water, the fluid is decomposed, potassa formed, and the metals appear to be separated unaltered. It reduces the metallic oxydes when heated with them, and when the potassium is in excess, it combines with the reduced metal. In consequence of this property, it decomposes flint glass and green glass, reducing the metallic oxydes they contain, forming potassa, which dissolves the glass. At a red heat, it acts even on the purest glass, attracting part of the oxygen of the alkali in the glass.

The preparations of this alkali that are used in medicine are :

1. Potassa fusa.
2. Liquor potassæ.
3. Potassa cum calce.
4. Subcarbonas potassæ.
5. Carbonas potassæ.
6. Sulphas potassæ.
7. Super-sulphas potassæ.
8. Tartras potassæ.
9. Acetas potassæ.
10. Citras potassæ.
11. Hyperoxymurias potassæ.
12. Sulphuretum potassæ.

Pota′ssa cum ca′lce. Potash with lime. *Calx cum kali puro. Causticum commune fortius. Lapis infernalis sive septicus.* "Take of solution of potash, three pints; fresh lime, a pound. Boil the solution of potash down to a pint, then add the lime, previously slaked by the addition of water, and mix them together intimately." This is in common use with surgeons, as a caustic, to produce ulcerations, and to open abscesses.

Pota′ssa impu′ra. See *Potassa.*

Pota′ssa fu′sa. Fused potash. *Kali purum. Alkali vegetabile fixum causticum.* "Take of solution of potash, a gallon. Evaporate the water, in a clean iron pot, over the fire, until, when the ebullition has ceased, the potash remains in a state of fusion; pour it upon a clean iron plate, into pieces of convenient form." This preparation of potash is violently caustic, destroying the living animal fibre with great energy.

Pota′ssæ ace′tas. Acetate of potash. Acetated vegetable alkali. *Kali acetatum. Sal diureticus. Terra foliata tartari. Sal sennerti.* "Take of subcarbonate of potash, a pound and a half. Acetic acid, a gallon. Mix them together in a large glass vessel, and having evaporated the solution to half, over the fire, add gradually as much more acetic acid as may be necessary for perfect saturation. Let the solution be further reduced to one half by evaporation, and strain it: then by means of a water-bath evaporate it, so that on being removed from the fire, it shall crystallize."

The acetate of potash is esteemed as a saline diuretic and deobstruent. It is given in the dose of from gr. x. to ʒss. three times a day in any appropriate vehicle against dropsies, hepatic obstructions and the like.

Pota′ssæ carbo′nas. Carbonate of potash. This preparation, which has been long known by the name of *Kali aëratum*, appeared in the last London Pharmacopœia for the first time. It is made thus:—"Take of subcarbonate of potash, made from tartar, a pound; subcarbonate of ammonia, three ounces; distilled water, a pint. Having previously dissolved the subcarbonate of potash in the water, add the subcarbonate of ammonia; then, by means of a sand-bath, apply a heat of 180° for three hours, or until the ammonia shall be driven off; lastly, set the solution by, to crystallize. The remaining solution may be evaporated in the same manner, that crystals may again form when it is set by."

This process was invented by Berthollet. The potash takes the carbonic acid from the ammonia, which is volatile, and passes off in the temperature employed. It is, however, very difficult to detach the ammonia entirely. Potash is thus saturated with carbonic acid, of which it contains double the quantity that the pure subcarbonate of potash does; it gives out this proportion on the addition of muriatic acid, and may be converted into the subsalt, by heating it a short time to redness. It is less nauseous to the taste than the subcarbonate; it crystallizes, and does not deliquesce. Water, at the common temperature, dissolves one-fourth its weight, and at 212°, five-sixths; but this latter heat detaches some of the carbonic acid.

The carbonate of potash is now generally used for the purpose of imparting carbonic acid to the stomach, by giving a scruple in solution with a table-spoonful of lemon-juice, in the act of effervescing.

Pota′ssæ li′quor. Solution of potash. *Aqua kali puri. Lixivium saponarium.* "Take of subcarbonate of potash, a pound, lime newly prepared, half a pound. Boiling distilled water, a gallon. Dissolve the potash in two pints of the water; add the remaining water to the lime. Mix the liquors while they are hot, stir them together, then set the mixture by in a covered vessel; and after it has cooled, strain the solution through a cotton bag."

If any diluted acid dropped into the solution occasion the extrication of bubbles of gas, it will be necessary to add more lime, and to strain it again. A pint of this solution ought to weigh sixteen ounces.

Pota′ssæ ni′tras. See *Nitre.*

Pota′ssæ subcarbo′nas. Subcarbonate of potash, formerly called *Kali præparatum. Sal absinthii. Sal Tartari. Sal plantarum.* "Take of impure potash, powdered, three pounds; boiling water, three pints and a half. Dissolve the potash in water, and filter; then pour the solution into a clean iron pot, and evaporate the water over a moderate fire, until the liquor thickens; then let the fire be withdrawn, and stir the liquor constantly with an iron rod, until the salt concretes into granular crystals."

A purer subcarbonate of potash may be prepared in the same manner from tartar, which must first be burnt, until it becomes ash-coloured.

This preparation of potash is in general use to form the citrate of potash for the saline draughts. A scruple is generally directed to be saturated with lemon juice. In this process, the salt which is composed of potash and carbonic acid is decomposed. The citric acid having a greater affinity for the potash than the carbonic, seizes it and forms the citrate of potash, whilst the carbonic acid flies off in the form of air. The subcarbonate of potash possesses antacid virtues, and may be exhibited with advantage in convulsions and other spasms of the intestines arising from acidity, in calculous and gouty complaints, leucorrhœa, scrophula, and aphthous affections. The dose is from ten grains to half a drachm.

Pota′ssæ subcarbona′tis li′quor. Solution of subcarbonate of potash. *Aqua kali præparati. Lixivium tartari. Oleum tartari per deliquium.* "Take of subcarbonate of potash, a pound; distilled water, twelve fluid ounces. Dissolve the subcarbonate of potash in the water, and then strain the solution through paper."

Pota′ssæ su′lphas. Formerly called *Kali vitriolatum. Alkali vegetabile vitriolatum. Sal de duobus. Arcanum duplicatum. Sal polychrestus. Nitrum vitriolatum. Tartarum vitriolatum.* "Take of the salt which remains after the distillation of nitric acid, two pounds; boiling water, two gallons. Mix them, that the salt may be dissolved; next add as much subcarbonate of potash as may be requisite for the saturation of the acid; then boil the solution, until a pellicle appears upon the surface, and, after straining, set it by, that crystals may form. Having poured away the water, dry the crystals on bibulous paper." Its virtues are cathartic, diuretic, and deobstruent; with which intentions it is administered in a great variety of diseases, as constipation, suppression of the lochia, fevers, icterus, dropsies, milk tumours, &c. The dose is from one scruple to half an ounce.

Pota′ssæ sulphure′tum. Sulphuret of potash. *Kali sulphuratum. Hepar sulphuris.* Liver of sulphur. "Take of washed sulphur, an ounce; subcarbonate of potash, two ounces; rub them together, and put them in a covered crucible, which is to be kept on the fire, till they unite." In this process the carbonic acid is driven off, and a compound formed of potash and sulphur. This preparation has been employed in several cutaneous diseases with advantage, both internally and in the form of bath or ointment. It has also been recommended in diabetes. The dose is from five to twenty grains.

Pota′ssæ supersu′lphas. Supersulphate of potash. "Take of the salt which remains after the distillation of nitric acid, two pounds; boiling water four pints. Mix them together, so that the salt may be dissolved, and strain the solution; then boil it to one half, and set it by that crystals may form. Having poured away the water, dry these crystals upon bibulous paper."

Pota′ssæ superta′rtras. See *Tartarum.*

Pota′ssæ ta′rtras. Tartrate of potash, formerly called *Kali tartarisatum. Tartarum solubile. Tartarus tartarisatus. Sal vegetabilis. Alkali vegetabile tartarisatum.* "Take of subcarbonate of potash, sixteen ounces; supertartrate of potash, three pounds; boiling water, a gallon. Dissolve the subcarbonate of potash in the water; next add the supertartrate of potash, previously reduced to powder, gradually, until bubbles of gas shall cease to arise. Strain the solution through paper, then boil it until a pellicle appear upon the surface, and set it by, that crystals may form. Having poured away the water, dry the crystals upon bibulous paper." Diuretic, deobstruent, and eccoprotic virtues are attributed to this preparation.

Potatoe, common. The root of the *Solanum tuberosum*, of Linnæus: which see.

Potatoe, Spanish. The root of the *Convolvulus batatas*, of Linnæus. It is a native of the West Indies. It is firm, and of a pale brown on the outside; white within, and very sweet, like chesnuts, and the only esculent root of the genus convolvulus.

POTENTI′LLA. (*A potentia*, from its efficacy.)

1. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Polygynia.*

2. The pharmacopœial name of the wild tansy.

Potenti′lla anseri′na. The systematic name of the silver-weed, or wild tansy. *Argentina. Anserina.* The leaves of this plant, *Potentilla; foliis dentatis, serratis, caule repente, pedunculis unifloris*, of Linnæus, possess mildly adstringent and corroborant qualities; but are seldom used, except by the lower orders.

Potenti′lla re′ptans. The systematic name of the common cinquefoil, or five-leaved grass. *Pentaphyllum.* The roots of this plant, *Potentilla; foliis quinatis, caule repente, pedunculis unifloris*, of Linnæus, have a bitterish styptic taste. They were used by the antients in the cure of intermittents; but the medicinal quality of cinquefoil is confined, in the present day, to stop diarrhœas and other fluxes.

POTE′RIUM. (From ϖοτηριον, a cup; so named from the shape of its flowers.) The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Polyandria.*

Pote′rium sanguiso′rba. The systematic name of the Burnet saxifrage, the leaves of which are often put into cool tankards; they have an adstringent quality.

POTT, Percival, was born in London in 1713. It was the wish of his friends to bring him up to the church, in which he might have obtained good patronage; but he had an irresistible inclination to the surgical profession. He was accordingly apprenticed to Mr. Nourse of St. Bartholomew's hospital, who gave anatomical lectures; for which he was employed in preparing the subjects, and thus laid the best foundation for chirurgical skill. In 1744 he was elected assistant surgeon, and five years after, one of the principal surgeons at the hospital. He had the merit of chiefly bringing about a great improvement in his profession, availing himself of the resources of nature under a lenient mode of treatment, and exploding the frequent use of the cautery, and other severe methods formerly resorted to. In 1756 he had the misfortune to receive a compound fracture of the leg; but the confinement occasioned by this accident led him to compose his "Treatise on Ruptures;" which was soon followed by an account of the Hernia Congenita. In 1758 he produced a judicious essay on "Fistula Lachrymalis;" and two years after an elaborate dissertation "On Injuries of the Head;" which was soon followed by "Practical Remarks on the Hydrocele," &c. In 1764 he was elected a fellow of the Royal Society; and about the same period he instituted a course of lectures on Surgery. In the following year his treatise "On Fistula in Ano" appeared, in which he effected a very great improvement; and in 1768 some remarks "On Fractures and Dislocations," were added to a new edition of his work on Injuries of the Head. Seven years after this he published "Chirurgical Observations" on Cataract, Polypus of the Nose, Cancer of the Scrotum, Ruptures, and Mortification of the lower Extremities: this was soon succeeded by a "Treatise on the Necessity of Amputation in some Cases;" and by "Remarks on the Palsy of the lower Limbs," from Curvature of the Spine. He had now attained the greatest eminence in his profession but towards the close of the year 1788 a severe attack of fever, neglected at first, terminated his active and valuable life.

POUPA'RTII LIGAME'NTUM. See *Poupart's ligament.*

POUPART'S LIGAMENT. *Ligamentum Poupartii.* Fallopian ligament. Inguinal ligament. A strong ligament, or rather a tendinous expansion of the external oblique muscle, going across from the inferior and anterior spinous process of the ilium, to the crista of the os pubis. It is under this ligament that the femoral vessels pass; and when the intestine or omentum passes underneath it, the disease is called a femoral hernia.

Powder, antimonial. See *Antimonialis pulvis.*

Powder of burnt hartshorn with opium. See *Pulvis cornu usti cum opio.*

Powder, compound, of aloes. See *Pulvis aloës compositus.*

Powder, compound, of chalk. See *Pulvis cretæ compositus.*

Powder, compound, of chalk with opium. See *Pulvis cretæ compositus cum opio.*

Powder, compound, of cinnamon. See *Pulvis cinnamomi compositus.*

Powder, compound, of contrayerva. See *Pulvis contrayervæ compositus.*

Powder, compound, of ipecacuanha. See *Pulvis ipecacuanhæ compositus.*

Powder, compound, of kino. See *Pulvis kino compositus.*

Powder, compound, of scammony. See *Pulvis scammoneæ compositus.*

Powder, compound, of senna. See *Pulvis sennæ compositus.*

Powder, compound, of tragacanth. See *Pulvis tragacanthæ compositus.*

Power, muscular. See *Irritability* and *Muscular motion.*

Power, tonic. See *Irritability.*

Præcipitate, red. See *Hydrargyri nitrico-oxydum.*

Præcipitate, white. See *Hydrargyrum præcipitatum album.*

PRÆCO'RDIA. (From *præ*, before, and *cor*, the heart.) The fore-part of the region of the thorax.

PRÆFU'RNIUM. (From *præ*, before, and *furnus*, a furnace.) The mouth of a chemical furnace.

PRÆPARA'NTIA MEDICAME'NTA. Medicines preparing the peccant fluids to pass off.

PRÆPARA'NTIA VA'SA. The spermatic vessels of the testicles.

PRÆPU'TIUM. (From *præputo*, to cut off before, because some nations used to cut it off in circumcision.) *Epagogion* of Dioscorides. *Posthe.* The prepuce. The membranous or cutaneous fold that covers the glans penis and clitoris.

Præpuce. See *Præputium.*

PRA'SIUM. From πρασια, a square border; so called from its square stalks.) Marrubium, or horehound.

PRA'SUM. (From πραω, to burn, because of their hot taste.) The leek.

PRA'XIS. (From πρασσω, to perform.) The practice of medicine.

PRECIPITA'TION. (*Præcipitatio*; from *præcipito*, to cast down.) When two bodies are united, for instance, an acid and an oxyde, and a third body is added, such as an alkali, which has a greater affinity with the acid than the metallic oxyde has, the consequence is, that the alkali combines with the acid, and the oxyde, thus deserted, appears in a separate state at the bottom of the vessel in which the operation is performed. This decomposition is commonly known by the name of *precipitation*, and the substance that sinks is named a *precipitate.*

The substance, by the addition of which

the phenomenon is produced, is denominated the *precipitant*.

PREDISPOSING CAUSE. *Causa prædisponens. Causa proëgumena.* That which renders the body susceptible of disease. The most frequent predisposing causes of diseases are, the temperament and habit of the body, idiosyncracy, age, sex, and structure of the part diseased.

PREDISPOSITION. *Prædispositio.* That constitution, or state of the solids, or fluids, or of both, which disposes the body to the action of disease.

PREGNANCY. *Utero gestation.* The particular manner in which pregnancy takes place has hitherto remained involved in obscurity, notwithstanding the laborious investigation of the most eminent philosophers of all ages.

Although pregnancy is a state which (with a few exceptions) is natural to all women, it is in general the source of many disagreeable sensations, and often the cause of diseases which might be attended with the worst consequences if not properly treated.

It is now, however, universally acknowledged, that those women who bear children, enjoy, usually, more certain health, and are much less liable to dangerous diseases, than those who are unmarried, or who prove barren.

Signs of pregnancy. — The womb has a very extensive influence, by means of its nerves, on many other parts of the body; hence, the changes which are produced on it by impregnation, must be productive of changes on the state of the general system. These constitute the signs of pregnancy.

During the first fourteen or fifteen weeks, the signs of pregnancy are very ambiguous, and cannot be depended on; for, as they proceed from the irritation of the womb on other parts, they may be occasioned by every circumstance which can alter the natural state of that organ.

The first circumstance which renders pregnancy probable, is the suppression of the periodical evacuation, which is generally accompanied with fulness in the breasts, head-ache, flushings in the face, and heat in the palms of the hands.

These symptoms are commonly the consequences of suppression, and therefore are to be regarded as signs of pregnancy, in so far only as they depend on it.

As, however, the suppression of the periodical evacuation often happens from accidental exposure to cold, or from the change of life in consequence of marriage, it can never be considered as an infallible sign.

The belly, some weeks after pregnancy, becomes flat, from the womb sinking, and hence drawing down the intestines along with it; but this cannot be looked upon as a certain sign of pregnancy, because an enlargement of the womb from any other cause will produce the same effect.

Many women, soon after they are pregnant, become very much altered in their looks, and have peculiar irritable feelings, inducing a disposition of mind which renders their temper easily ruffled, and inciting an irresistible propensity to actions of which, on other occasions, they would be ashamed.

In such cases, the features acquire a peculiar sharpness, the eyes appear larger, and the mouth wider than usual; and the woman has a particular appearance, which cannot be described, but with which women are well acquainted.

These breeding symptoms, as they are called, originate from the irritation produced on the womb by impregnation; and as they may proceed from any other circumstance which can irritate that organ, they cannot be depended on when the woman is not young, or where there is not a continued suppression for at least three periods.

The irritations on the parts contiguous to the womb are equally ambiguous; and therefore the signs of pregnancy, in the first four months, are always to be considered as doubtful, unless every one enumerated be distinctly and unequivocally present.

From the fourth month, the signs of pregnancy are less ambiguous, especially after the womb has ascended into the cavity of the belly. In general, about the fourth month, or a short time after, the child becomes so much enlarged, that its motions begin to be felt by the mother; and hence a sign is furnished at that period called quickening. Women very improperly consider this sign as the most unequivocal proof of pregnancy; for though, when it occurs about the period described, preceded by the symptoms formerly enumerated, it may be looked upon as a sure indication that the woman is with child; yet, when there is an irregularity, either in the preceding symptoms or in its appearance, the situation of the woman must be doubtful.

This fact will be easily understood; for as the sensation of the motion of the child cannot be explained, or accurately described, women may readily mistake other sensations for that of quickening. Flatus has often been so pent up in the bowels, that the natural pulsation of the great arteries, of which people are conscious only in certain states of the body, has frequently been mistaken for this feeling.

After the fourth month, the womb rises gradually from the cavity of the pelvis, enlarges the belly, and pushes out the navel: hence the protrusion of the navel has been considered one of the most certain signs of pregnancy in the latter months. Every circumstance, however, which increases the bulk of the belly occasions this symptom; and therefore it cannot be trusted to, unless other signs concur.

The progressive increase of the belly, along with suppression, after having been formerly regular, and the consequent symptoms, together with the sensation of quickening at the proper period, afford the only true marks of pregnancy.

These signs, however, are not to be entirely depended on; for the natural desire which every woman has to be a mother, will induce her to conceal, even from herself, every symptom which may render her situation doubtful, and to magnify every circumstance which can tend to prove that she is pregnant.

Beside quickening and increase of bulk of the belly, another symptom appears in the latter months, which, when preceded by the ordinary signs, renders pregnancy certain beyond a doubt. It is the presence of milk in the breasts. When, however, there is any irregularity in the preceding symptoms, this sign is no longer to be considered of any consequence.

As every practitioner must naturally wish to distinguish pregnancy from disease, the disorders which resemble it should be thoroughly understood, and also their diagnostics. It is, however, necessary to remark, that wherever any circumstance occurs which affords the most distant reason to doubt the case, recourse ought to be had to the advice of an experienced practitioner, and every symptom should be unreservedly described to him.

Prehe'nsio. (From *prehendo*, to surprise; so named from its sudden seizure.) The catalepsy.

PRESBYO'PIA. (From πρεσϐυς, old, and ωψ, the eye; because it is frequent with old men.) That defect of the sight by which objects close are seen confusedly, but, at remoter distances, distinctly. As the myopia is common to infants, so the presbyopia is a malady common to the aged. The proximate cause is a tardy adunation of the rays in a focus, so that it falls beyond the retina. The species are,

1. *Presbyopia* from a flatness of the cornea. By so much the cornea is flatter, so much the less and more tardy it refracts the rays into a focus. This evil arises, 1st, From a want of aqueous or vitreous humour, which is common to the aged; or may arise from some disease; 2d, From a cicatrix, which diminishes the convexity of the cornea; 3d, From a natural conformation of the cornea.

2. *Presbyopia* from too flat a crystalline lens. This evil is most common to the aged, or it may happen from a wasting of the crystalline lens.

3. *Presbyopia* from too small density of the cornea or humours of the eye. By so much more these humours are thin or rarified, so much the less they refract the rays of light. Whosoever is affected from this cause is cured in older age; for age induces a greater density of the cornea and lens. From this it is an observed fact, that the *presbyopes* are often cured spontaneously, and throw away their glasses, which younger persons in this disease are obliged to use.

4. *Presbyopia* from a custom of viewing continually remote objects; hence artificers who are occupied in remote objects are said to contract this malady. The reason of this phenomenon is not very clear.

5. *Presbyopia senilis.* From a multitude of causes aged persons are presbyopes; from a penury of humours, which render the cornea and lens flatter, and the bulb shorter. When in senile ages, from dryness, the bulb of the eye becomes flatter and shorter, and the cornea flatter, those who were short-sighted or myopes before, see now without their concave glasses.

6. *Presbyopia*, from too close a proximity of objects. The focus is shorter of distant, but longer of nearer objects.

7. *Presbyopia* from a coarctated pupil.

8. *Presbyopia mercurialis*, which arises from the use of mercurial preparations. The patient feels a pressing pain in the eye, which, from being touched is increased, and the bulb of the eye appears as if rigid, and with difficulty can be moved. Near objects the patient can scarcely distinguish, and distant only in a confused manner. Many have supposed this disorder an imperfect amaurosis.

Pre'sbytæ. See *Presbyopia.*

Presby'tia. (From πρεσϐυς, old; because it is usual to old people.) See *Presbyopia.*

Presu'ra. (From πρηθω, to inflame.) Inflammation at the ends of the fingers from cold.

Priapei'a. See *Nicotiana rustica.*

Priapi'scus. (From πριαπος, the penis.) 1. A tent made in the form of a penis. 2. A bougie.

PRIAPI'SMUS. (From πριαπος, a heathen god, whose penis is always painted erect.) Priapism. A continual erection of the penis. Cœlius Aurelianus says it is a palsy of the seminal vessels, by which the disorder is produced.

Priapism. See *Priapismus.*

PRIA'PUS. (Πριαπος, a heathen god, remarkable for the largeness of his genitals.) 1. The penis.

2. A name of the nepenthes, or wonderful plant, from the appendages at the end of the leaves resembling an erected penis.

PRI'MÆ VI'Æ. The first passages. The stomach and the intestinal tube are so called, and the lacteals the *secundæ viæ.*

Primary teeth. See *Teeth.*

Primrose. See *Primula vulgaris.*

PRI'MULA. (From *primulus*, the beginning; so called because it flowers in the beginning of the spring.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

Pri'mula ve'ris. (From *primulus*, the beginning, so called because it flowers in the beginning of the spring.) *Verbasculum.*

The cowslip, paigil, or peagle. The flowers of this plant have a moderately strong and pleasant smell, and a somewhat roughish bitter taste. Vinous liquors impregnated with their flavour by maceration or fermentation, and strong infusions of them drank as tea, are supposed to be mildly corroborant, antispasmodic, and anodyne. An infusion of three pounds of the fresh flowers in five pints of boiling water is made in the shops into a syrup of a fine yellow colour, and agreeably impregnated with the flavour of the cowslip.

Pri'mula vulga'ris. The primrose. The leaves and root of this common plant possess sternutatory properties.

Pri'nceps alexipharmaco'rum. Angelica. Which by some was formerly so much esteemed as to obtain this name.

PRINCIPLES. *Principia*. Primary substances. According to modern chemists, this term is applied to those particles which are composed of two or more elements, (see *Elements*,) that may again be decomposed by the action of fire or putridity, such as water, gum, resin, &c.

PRINGLE, Sir John, was born in Scotland in 1707. Having determined to make medicine his profession, he went to Edinburgh for a year, and then to Leyden, to profit by the instructions of the celebrated Boerhaave, where he took his degree in 1730. Then settling at Edinburgh, he obtained four years after the appointment of professor of moral philosophy jointly with Mr. Scott. In 1742 he was made physician to the Earl of Stair, who then commanded the British army, and soon after physician to the military hospital in Flanders. He acquitted himself with so much credit, that the Duke of Cumberland, who succeeded to the command, appointed him, in 1745, physician-general to the forces, and subsequently to the royal hospitals, in the Low Countries, when he resigned his Scotch professorship. He soon after accompanied the same nobleman in his expedition against the rebels in Scotland: but in 1747 went again to the army abroad, where he continued till the treaty of Aix-la-Chapelle. The Duke of Cumberland then appointed him his physician, and he settled in London; but the war of 1755 called him again to the army, which, however, he finally quitted three years after. He had been elected a fellow of the Royal Society in 1745, and on settling in London, contributed many papers to their transactions, particularly his Experiments on Septic and Antiseptic Substances, for which he was presented with the Copleian medal. In 1752 his "Observations on the Diseases of the Army," first appeared, and rapidly passed through several editions, and was translated into other languages: the utility of the work, indeed, equalled the reputation it acquired, and which it still preserves, especially from the importance of the prophylactic measures suggested. After quitting the army, he was admitted a licentiate, and his fame as a physician, as well as philosopher, speedily attained a high pitch; he received successively various appointments about the royal family, was elected a fellow of the College, and in 1766 raised to the dignity of a baronet. Among numerous literary honours from various academies of science in Europe, the highest was conferred upon him in 1770, being then elected president of the Royal Society; the duties of which office he zealously fulfilled for eight years, when declining health compelled his resignation. His discourses on the annual presentation of the Copleian medals displayed so much learning and general information, that their publication was requested. In 1780 he went to Edinburgh for the improvement of his health; but the want of his accustomed society, and the sharpness of the air, compelled him to return in the following year; he presented, however, to the College of Physicians there before his departure ten folio volumes, in manuscript, of "Medical and Physical Observations," with the restriction that they should not be published, nor lent out of the library. His death happened soon after his return to London, namely, in the beginning of 1782.

Priono'des. (From πριών, a saw.) Serrated: applied to the sutures of the skull.

PRI'OR ANNULA'RIS. (*Musculus prior annularis.*) Fourth *interosseus*, of Winslow. An internal interosseus muscle of the hand. See *Interossei manus*.

PRI'OR I'NDICIS. *Extensor tertii internodii indicis*, of Douglas. *Sou-metacarpolateri-phalangien*, of Dumas. An internal interosseal muscle of the hand, which draws the fore-finger inwards towards the thumb, and extends it obliquely.

PRI'OR ME'DII. (*Musculus prior medii.*) *Second interosseus*, of Douglas, and *sou-metacarpo-lateri phalangien*, of Dumas. An external interosseous muscle of the hand. See *Interossei manus*.

PROBANG. A flexible piece of whalebone with sponge fixed to the end.

PROBE. (From *probo*, to try; because surgeons try the depth and extent of wounds, &c. with it.) *Stylus*. A chirurgical instrument of a long and slender form.

Pro'bole. (From προϐαλλω, to project.) A prominence. An apophysis.

PROBO'SCIS. (From πρό, before, and βοσκω, to feed.) A snout or trunk, as that of an elephant, by which it feeds itself.

Proca'rdium. (From προ, before, and καρδια, the stomach or heart.) The pit of the stomach.

PROCATARCTIC CAUSE. (*Causa

procatarctica, from προκαταρχω, to go before.) See *Exciting cause.*

PROCESS. (*Processus*, from *procedo*, to go before.) An eminence of a bone; as the spinous and transverse processes of the vertebræ.

Proce'ssus cauda'tus. See *Lobulus caudatus.*

Proce'ssus cæ'ci vermifo'rmis. See *Intestines.*

Proce'ssus cilia'ris. See *Ciliar ligament.*

Proce'ssus mamilla'res. A name formerly applied to the olfactory nerves.

PROCIDE'NTIA. (From *procido*, to fall down.) A falling down of any part; thus, *procidentia ani, uteri, vaginæ*, &c.

Proco'ndylus. (From προ, before, and κονδυλος, the middle joint of the finger.) The first joint of a finger next the metacarpus.

PROCTA'LGIA. (From πρωκτος, the fundament, and αλγος, pain.) A violent pain at the anus. It is mostly symptomatic of some disease, as piles, scirrhus, prurigo, cancer, &c.

PROCTI'TIS. (From πρωκτος, the anus.) *Clunesia. Cyssotis.* Inflammation of the internal or mucous membrane of the lower part of the rectum.

Proctoleucorrhœ'a. (From πρωκτος, the anus, λευκος, white, and ρεω, to flow.) *Proctorrhœa.* A purging of white mucus with heat and itching.

Proctorrhœ'a. (From πρωκτος, the anus, and ρεω, to flow.) See *Proctoleucorrhœa.*

PROFLU'VIA. (From *profluo*, to run down.) Fluxes. The fifth order in the Class *Pyrexiæ*, of Cullen's nosology, characterised by pyrexia, with increased excretions.

Proflu'vii co'rtex. See *Nerium antidysentericum.*

PROFU'NDUS. See *Flexor profundus perforans.*

PROFU'SIO. A passive loss of blood. A genus of disease in the Class *Locales*, and Order *Apocenoses*, of Cullen.

Proglo'ssis. (From προ, before, and γλωσσα, the tongue.) The tip of the tongue.

PROGNO'SIS. (From προ, before, and γινωσκω, to know.) The art of foretelling the event of diseases from particular symptoms.

PROGNOSTIC. (*Prognosticus*, from προγινωσκω, to know before-hand.) Applied to those symptoms which may be foretold before they appear.

PROLA'PSUS. (From *prolabor*, to slip down.) *Procidentia. Delapsio. Exania. Proptoma. Proptosis.* A protrusion. A genus of disease in the Class *Locales*, and Order *Ectopiæ*, of Cullen; distinguished by the falling down of a part that is uncovered.

Prole'pticus. (From προλαμϐανω, to anticipate.) Applied to those diseases whose paroxysms anticipate each other, or return after less and less intervals of intermission.

Promalacte'rium. (From προ, before, and μαλασσω, to soften.) The room where the body was softened previous to bathing.

Prometopi'dium. (From προ, before, and μετωπον, the forehead.) *Prometopis.* The skin upon the forehead.

Prometo'pis. See *Prometopidium.*

PRONATION. The act of turning the palm of the hand downwards. It is performed by rotating the radius upon the ulna, by means of several muscles which are termed pronators; as,

Prona'tor quadra'tus. See *Pronator radii quadratus.*

Prona'tor ra'dii bre'vis. See *Pronator radii quadratus.*

PRONA'TOR RA'DII QUADRA'TUS. *Pronator quadratus*, of Douglas and Albinus. *Pronator quadratus sive transversus*, of Winslow. *Pronator radii brevis seu quadratus*, of Cowper. *Cubito radial*, of Dumas. This, which has gotten its name from its use and its shape, is a small fleshy muscle, situated at the lower and inner part of the fore-arm, and covered by the tendons of the flexor muscles of the hand. It arises tendinous and fleshy from the lower and inner part of the ulna, and runs nearly in a transverse direction, to be inserted into that part of the radius which is opposite to its origin, its inner fibres adhering to the interosseous ligament. This muscle assists in the pronation of the hand, by turning the radius inwards.

PRONA'TOR RA'DII TE'RES of Innes and Cowper. *Pronator teres*, of Albinus and Douglas. *Pronator teres, sive obliquus*, of Winslow. *Epitrochloradial*, of Dumas. This is a small muscle, situated at the upper and anterior part of the fore-arm. It is called *teres*, to distinguish it from the pronator quadratus. It arises tendinous and fleshy from the anterior and inferior part of the outer condyle of the os humeri; and tendinous from the coronoid process of the ulna, near the insertion of the brachialis internus. The median nerve passes between these two portions. From these origins the muscle runs obliquely downwards and outwards, and is inserted, tendinous and fleshy, into the anterior and convex edge of the radius, about the middle of that bone. This muscle, as its name indicates, serves to turn the hand inwards.

Pronerva'tio. (From *pro*, before, and *nervus*, a string.) A tendon or string like the end of a muscle.

PROPHYLACTIC. (*Prophylactica*, from προ, and φυλασσω, to defend.) Any means made use of to preserve health.

Proprieta'tis eli'xir. Elixir of aloes, or the tinctura aloes composita.

Propto'ma. (From προπιπτω, to fall

down.) *Procidentia.* A relaxation, such as that of the scrotum, of the under lip, of the breasts in females, of the præpuce, or of the ears.

Propye′ma. (From ϖρο, before, and πυον, pus.) A premature collection of pus.

Pro′ra. (From πρωρα, the prow of a vessel.) The occiput.

Prosarthro′sis. (From προς, to, and αρθροω, to articulate.) That articulation which has manifest motion.

Prospe′gma. (From προσπηγνυμι, to fix near.) A fixing of humours in one spot.

Pro′stasis. (From προιϛημι, to predominate.) An abundance of morbid humours.

PROSTATE GLAND. (*Glandula prostata*, from προ, before, and ιστημι, to stand; because it is situated before the urinary bladder.) *Corpus glandulosum. Adenoides.* A very large, heart-like, firm gland, situated between the neck of the urinary bladder and the bulbous part of the urethra. It secretes the lacteal fluid, which is emitted into the urethra by ten or twelve ducts, that open near the verumontanum, during coition. This gland is liable to inflammation and its consequences.

Prostate, inferior. See *Transversus perinei alter.*

Proto′gala. (From πρωτος, first, and γαλα, milk.) The first milk after delivery.

PROXIMATE CAUSE. *Causa proxima.* The proximate cause of a disease may be said to be in reality the disease itself. All proximate causes are either diseased actions of simple fibres, or an altered state of the fluids.

PRU′NA. (Pl. of *prunum.*) Plums or prunes. See *Plums.*

Prune. See *Plums.*

PRUNE′LLA. (From *pruna*, a burn, because it heals burns.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.*

2. The pharmacopœial name of what is also called self-heal. *Prunella; foliis omnibus ovato-oblongis, serratis, petiolatis*, of Linnæus; it is recommended as an adstringent in hæmorrhages and fluxes, as also in gargles against aphthæ and inflammation of the fauces.

Prune′lla vulga′ris. The systematic name of the self-heal. *Prunella. Consolida minor. Symphitum minus.*

Prunelloe. See *Plum.*

Pru′num ga′llicum. See *Prunus domestica.*

Pru′num sylve′stre. See *Prunus spinosa.*

PRU′NUS. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Monogynia.*

Pru′nus armeni′aca. Apricots are the fruit of the *Prunus armeniaca*, of Linnæus. When ripe they are easily digested, and are considered as a pleasant and nutritious delicacy.

Pru′nus a′vium. The systematic name of the black cherry-tree. *Prunus; umbellis sessilibus, foliis ovato-lanceolatis, subtus pubescentibus, conduplicatis*, of Linnæus. The flavour of the ripe fruit is esteemed by many, and if not taken in too large quantities, they are extremely salutary. A gum exudes from the tree, whose properties are similar to those of gum arabic.

Pru′nus ce′rasus. The systematic name of the red cherry-tree. *Prunus umbellis subpedunculatis, foliis ovato-lanceolatis, glabris, conduplicatis*, of Linnæus. This species possesses a pleasant, acidulated, sweet flavour, and is extremely proper in fevers, scurvy, and bilious obstructions. Red cherries are mostly eaten as a luxury, and are very wholesome, except to those whose bowels are remarkably irritable.

Pru′nus dome′stica. The systematic name of the plum or damson-tree. *Prunus pedunculis subsolitariis, foliis lanceolato ovatis convolutis, ramis muticis; gemmæ floriferæ aphyllæ*, of Linnæus. Prunes are considered as emollient, cooling, and laxative, especially the French prunes, which are directed in the decoction of senna, and other purgatives; and the pulp is ordered in the *electuarium é senna.* The *Damson* is only a variety, which, when perfectly ripe, affords a wholesome article for pies, tarts, &c. gently opening the body; but when damsons are not perfectly mature, they produce colicky pains, diarrhœa, and convulsions in children. See *Plums.*

Pru′nus lauro-ce′rasus. The systematic name of the poison laurel. *Laurocerasus.* Common or cherry laurel. *Prunus floribus racemosis foliis sempervirentibus dorso biglandulosis*, of Linnæus. The leaves of the lauro-cerasus have a bitter styptic taste, accompanied with a flavour resembling that of bitter-almonds, or other kernels of the drupaceous fruits: the flowers also manifest a similar flavour. The powdered leaves, applied to the nostrils, excite sneezing, though not so strongly as tobacco. The kernel-like flavour which these leaves impart being generally esteemed grateful, has sometimes caused them to be employed for culinary purposes, and especially in custards, puddings, blancmange, &c.; and as the proportion of this sapid matter of the leaf to the quantity of the milk is commonly inconsiderable, bad effects have seldom ensued. But as the poisonous quality of this laurel is now indubitably proved, the public ought to be cautioned against its internal use.

The following communication to the Royal Society, by Dr. Madden, of Dublin, contains the first and principal proofs of the deleterious effects of this vegetable upon mankind: — "A very extraordinary accident that fell out here some months ago, has discovered to us a most dangerous poison, which was never before known to be so, though it has been in frequent use among us. The thing I mean is a simple water, distilled from the leaves of the lauro-cerasus; the water is at first milky, but the oil which comes over being, in a good measure, separated from the phlegm, by passing it through a flannel bag, it becomes as clear as common water. It has the smell of bitter almonds, or peach-kernel, and has been for many years in frequent use among our housewives and cooks, to give that agreeable flavour to their creams and puddings. It has also been much in use among our drinkers of drams; and the proportion they generally use it in has been one part of laurel-water to four of brandy. Nor has this practice, however frequent, ever been attended with any apparent ill consequences, till some time in the month of September 1728, when it happened that one Martha Boyse, a servant, who lived with a person who sold great quantities of this water, got a bottle of it from her mistress, and gave it to her mother. Ann Boyse made a present of it to Frances Eaton, her sister, who was a shop-keeper in town, and who, she thought, might oblige her customers with it. Accordingly, in a few days, she gave about two ounces to a woman called Mary Whaley, who drank about two-thirds of what was filled out, and went away. Frances Eaton drank the rest. In a quarter of an hour after Mary Whaley had drank the water, (as I am informed,) she complained of a violent disorder in her stomach, soon after lost her speech, and died in about an hour, without vomiting or purging, or any convulsion. The shop-keeper, F. Eaton, sent word to her sister, Ann Boyse, of what had happened, who came to her upon the message, and affirmed that it was not possible the cordial (as she called it) could have occasioned the death of the woman; and, to convince her of it, she filled out about three ounces and drank it. She continued talking with F. Eaton about two minutes longer, and was so earnest to persuade her of the liquor's being inoffensive, that she drank about two spoonfuls more, but was hardly well seated in her chair when she died without the least groan, or convulsion. Frances Eaton, who, as before observed, had drank somewhat more than a spoonful, found no disorder in her stomach, or elsewhere; but to prevent any ill consequences, she took a vomit immediately, and has been well ever since." — Dr. Madden mentions another case, of a gentleman at Kilkenny, who mistook a bottle of laurel-water for a bottle of ptisan. What quantity he drank is uncertain, but he died in a few minutes, complaining of a violent disorder in the stomach. In addition to this, we may refer to the unfortunate case of Sir Theodosius Boughton, whose death, in 1780, an English jury declared to be occasioned by this poison. In this case, the active principle of the lauro-cerasus was concentrated by repeated distillations, and given to the quantity of one ounce; the suddenly fatal effects of which must be still in the recollection of the public. To brute animals this poison is almost instantaneously mortal, as amply appears by the experiments of Madden, Mortimer, Nicholls, Fontana, Langrish, Vater, and others. The experiments conducted by these gentlemen, show that the laurel-water is destructive to animal life, not only when taken into the stomach, but also on being injected into the intestines, or applied externally to different organs of the body. It is remarked, by Abbé Fontana, that this poison, even "when applied in a very small quantity to the eyes, or to the inner part of the mouth, without touching the œsophagus, or being carried into the stomach, is capable of killing an animal in a few minutes: whilst, applied in a much greater quantity to wounds, it has so little activity, that the weakest animals, such as pigeons, resist its action."

The most volatile is the most active part of the lauro-cerasus; and if we judge from its sensible qualities, an analogous principle seems to pervade many other vegetable substances, especially the kernels of drupaceous fruits; and in various species of the amygdalus, this sapid principle extends to the flowers and leaves. It is of importance to notice, that this is much less powerful in its action upon human subjects than upon dogs, rabbits, pigeons, and reptiles. To poison man, the essential oil of the lauro-cerasus must be separated by distillation, as in the spirituous or common laurel-water; and unless this is strongly embued with the oil, or given in a large dose, it proves innocent. Dr. Cullen observes, that the sedative power of the lauro-cerasus, acts upon the nervous system in a different manner from opium and other narcotic substances, whose primary action is upon the animal functions; for the lauro-cerasus does not occasion sleep, nor does it produce local inflammation, but seems to act directly upon the vital powers. Abbé Fontana supposes that this poison destroys animal life, by exerting its effects upon the blood; but the experiments and observations from which he draws this opinion are evidently inconclusive. It may also be remarked, that many of the Abbé's experiments contradict each other. Thus, it appears from the citation given above, that the poison of this vegetable, when applied to wounds, does not prove fatal; but future experiments led the Abbé to assert that the oil of the lauro-cerasus, "whether given internally, or applied to the wounds of animals, is one of the most terrible and deadly poisons known." Though this vegetable seems to have escaped the notice of Stoerck, yet it is not without advocates for its medical use. Linnæus informs us, that in Switzerland it is commonly and successfully used in pulmonary complaints. Langrish mentions its efficacy in agues; and as Bergius found bitter almonds to have this effect, we may, by analogy, conclude that this power of the lauro-cerasus is well established. Baylies found that it possessed a remarkable power of diluting the blood, and from experience, recommended it in all cases of disease supposed to proceed from too dense a state of that fluid; adducing particular instances of its efficacy in rheumatism, asthmas, and schirrous affections. Nor does this author seem to have been much afraid of the deleterious quality of lauro-cerasus, as he directs a pound of its leaves to be macerated in a pint of water, of which he gives from thirty to sixty drops three or four times a-day.

Pru′nus pa′dus. The systematic name of the wild cluster, or bird cherry-tree. *Padus.* The bark and berries of this shrub are used medicinally. The former, when taken from the tree, has a fragrant smell, and a bitter, subastringent taste, somewhat similar to that of bitter almonds. Made into a decoction, it cures intermittents, and it has been recommended in the cure of several forms of syphilis. The latter are said to cure the dysentery.

Pru′nus spino′sa. The systematic name of the sloe-tree. *Prunus sylvestris. Prunus pedunculis solitariis, foliis lanceolatis, glabris, ramis spinosis,* of Linnæus. It is sometimes employed in gargles, to tumefactions of the tonsils and uvula, and from its adstringent taste was formerly much used in hæmorrhages, &c.

PRURI′GO. (From *prurio, to itch.*) *Pruritus. Scabies. Psora. Darta. Libido. Pavor.* The prurigo is a genus of disease in the order *papulous eruptions* of Dr. Willan's cutaneous diseases. As it arises from different causes, or at different periods of life, and exhibits some varieties in its form, he describes it under the titles of prurigo mitis, prurigo formicans, and prurigo senilis. In these the whole surface of the skin is usually affected; but there are likewise many cases of local prurigo, which will be afterwards noticed according to their respective situations.

1. The *prurigo mitis* originates without any previous indisposition, generally in spring, or the beginning of summer. It is characterised by soft and smooth elevations of the cuticle, somewhat larger than the papulæ of the lichen, from which they also differ by retaining the usual colour of the skin; for they seldom appear red, or much inflamed, except from violent friction. They are not, as in the other case, accompanied with tingling, but with a sense of itching almost incessant. This is, however, felt more particularly on undressing, and often prevents rest for some hours after getting into a bed. When the tops of the papulæ are removed by rubbing or scratching, a clear fluid oozes out from them, and gradually concretes into thin black scabs.

This species of prurigo mostly affects young persons, and its cause may, I think, says Dr. Willan, in general be referred to sordes collected on the skin, producing some degree of irritation, and also preventing the free discharge of the cutaneous exhalation; the bad consequences of which must necessarily be felt at that season of the year when perspiration is most copious. Those who have originally a delicate or irritable skin, must likewise, in the same circumstances, be the greates sufferers.

The eruption extends to the arms, breast, back, and thighs, and often continues during two or three months of the summer, if not relieved by proper treatment. When persons affected with it neglect washing the skin, or are uncleanly in their apparel, the eruption grows more inveterate, and at length, changing its form, often terminates in the itch. Pustules arise among the papulæ, some filled with lymph, others with pus. The acarus scabiei begins to breed in the furrows of the cuticle, and the disorder becomes contagious.

2. The *Prurigo formicans* is a much more obstinate and troublesome disease than the foregoing. It usually affects persons of adult age, commencing at all seasons of the year indifferently; and its duration is from four months to two or three years, with occasional short intermissions. The papulæ are sometimes larger, sometimes more obscure than in the preceding species; but are, under every form, attended with an incessant, almost intolerable itching. They are diffused over the whole body, except the face, feet, and palms of the hands; they appear, however, in greatest number on those parts which, from the ordinary mode of dress, are subjected to tight ligatures; as about the neck, loins, and thighs.

The itching is complicated with other sensations, which are variously described by patients. They sometimes feel as if small insects were creeping on the skin; sometimes as if stung all over by ants; sometimes as if hot needles were piercing the skin in divers places. On standing before a fire, or undressing, and more particularly on getting into bed, these sensations become most violent, and usually preclude all rest during the greater part of the night. The prurigo formicans is by most practitioners deemed contagious, and confounded with the itch. In endeavouring to ascertain the justness of this opinion, Dr. Willan has been led to make the following remarks: 1. The eruption is, for the most part, connected with internal disorder, and arises where no source of infection can be traced. 2. Persons affected may have constant intercourse with several others, and yet never communicate the disease to any of them. 3. Several persons of one family may have the prurigo formicans about the same time; but he thinks this should be referred rather to a common predisposition than to contagion, having observed that individuals of a family are often so affected at certain seasons of the year, even when they reside at a distance from each other.

Although the prurigo formicans is never, like the former species, converted into the itch, yet it does occasionally terminate in a pustular disease, not contagious.

3. *Prurigo senilis.* This affection does not differ much in its symptoms and external appearances from the prurigo formicans; but has been thought by medical writers to merit a distinct consideration, on account of its peculiar inveteracy. The prurigo is perhaps aggravated, or becomes more permanent in old age from the dry, condensed state of the skin and cuticle which often takes place at that period. Those who are affected with it in a high degree have little more comfort to expect during life, being incessantly tormented with a violent and universal itching. The state of the skin in the prurigo senilis, is favourable to the production of an insect, the pediculus humanus, more especially to the variety of it usually termed body-lice.

These insects, it is well known, are bred abundantly among the inhabitants of sordid dwellings, of jails, work-houses, &c. and in such situations prey upon persons of all ages indiscriminately. But in the prurigo senilis they arise, notwithstanding every attention to cleanliness or regimen, and multiply so rapidly that the patient endures extreme distress, from their perpetual irritation. The nits or eggs are deposited on the small hairs of the skin, and the pediculi are only found on the skin, or on the linen, not under the cuticle, as some authors have represented. In connection with the foregoing series of complaints, Dr. Willan mentions some pruriginous affections which are merely local. He confines his observations to the most troublesome of these, seated in the podex, præputium, urethra, pubes, scrotum, and pudendum muliebre. Itching of the nostrils, eye-lids, lips, or of the external ear, being generally symptomatic of other diseases, do not require a particular consideration.

1. *Prurigo podicis.* Ascarides in the rectum excite a frequent itching and irritation about the sphincter ani, which ceases when the cause is removed by proper medicines. A similar complaint often arises, independently of worms, hæmorrhoidal tumours, or other obvious causes, which is mostly found to affect persons engaged in sedentary occupations; and may be referred to a morbid state of secretion in the parts, founded, perhaps, on a diminution of constitutional vigour. The itching is not always accompanied with an appearance of papulæ or tubercles; it is little troublesome during the day-time, but returns every night soon after getting into bed, and precludes rest for several hours. The complaint continues in this form during three or four months, and has then an intermission, till it is produced again by hot weather, fatigue, watching, or some irregularity in diet. The same disease occurs at the decline of life, under a variety of circumstances.

Women, after the cessation of the catamenia, are liable to be affected with this species of prurigo, more especially in summer or autumn. The skin between the nates is rough and papulated, sometimes scaly, and a little humour is discharged by violent friction. Along with this complaint, there is often an eruption of itching papulæ on the neck, breast, and back; a swelling and inflammation of one or both ears, and a discharge of matter from behind them, and from the external meatus auditorius. The prurigo podicis sometimes occurs as a symptom of the lues venerea.

2. The *prurigo præputii* is owing to an altered state of secretion on the glans penis, and inner surface of the præputium. During the heat of summer there is also, in some persons an unusual discharge of mucus, which becomes acrimonious, and produces a troublesome itching, and often an excoriation of these parts. Washing of them with water, or soap and water, employed from time to time, relieves the complaint, and should indeed be practised as an ordinary point of cleanliness, where no inconvenience is immediately felt. If the fluid be secreted in too large a quantity, that excess may be restrained, by washes made with the liquor plumbi subacetatis or by applying the unguentum plumbi superacetatis.

3. *Prurigo urethralis.* A very troublesome itching sometimes takes place at the extremity of the urethra in females, without any manifest cause. It occurs as well in young women as in those who are of an advanced age. On examination no stricture nor tumour has been found along the course of the urethra. Probably, however, the itching may be occasioned by a morbid state

of the neck of the bladder, being in some instances connected with pain and difficulty of making water.

An itching at the extremity of the urethra in men is produced by calculi, and by some diseases of the bladder. In cases of stricture an itching is also felt, but near the place where the stricture is situated. Another cause of it is small broken hairs, which are sometimes drawn in from the pubes, between the præputium and glans, and which afterwards becoming fixed in the entrance of the urethra, occasion an itching, or slight stinging, particularly on motion. Mr. J. Pearson, surgeon of the Lock Hospital, has seen five cases of this kind, and gave immediate relief by extracting the small hair from the urethra.

4. *Prurigo pubis.* Itching papulæ often arise on the pubes, and become extremely sore if their tops are removed by scratching. They are occasioned sometimes by neglect of cleanliness, but more commonly by a species of pediculus, which perforates the cuticle, and thus derives its nourishment, remaining fixed in the same situation. These insects are termed by Linnæus, &c. *pediculi pubis*; they do not, however, affect the pubes only, but often adhere to the eye-brows, eye-lids, and axillæ. They are often found, also, on the breast, abdomen, thighs, and legs, in persons of the sanguine temperament, who have those parts covered with strong hairs. It is remarkable that they seldom or never fix upon the hairy scalp. The great irritation produced by them on the skin, solicits constantly scratching, by which they are torn from their attachments: and painful tubercles arise at the places where they had adhered. When the pediculi are diffused over the greater part of the surface of the body, the patient's linen often appears as if sprinkled with drops of blood.

5. *Prurigo scroti.* The scrotum is affected with a troublesome and constant itching from ascarides within the rectum, from friction by violent exercise in hot weather, and very usually from the pediculi pubis. Another and more important form of the complaint appears in old men, sometimes connected with the prurigo podicis, and referable to a morbid state of the skin, or superficial glands of the part. The scrotum, in this case, assumes a brown colour, often also becoming thick, scaly, and wrinkled. The itching extends to the skin covering the penis, more especially along the course of the urethra; and has little respite, either by day or night.

6. The *Prurigo pudendi muliebris*, is somewhat analogous to the prurigo scroti in men. It is often a symptomatic complaint in the lichen and lepra; it likewise originates from ascarides irritating the rectum, and is in some cases, connected with a discharge of the fluor albus.

A similar affection arises in consequence of the change of state in the genital organs at the time of puberty, attended with a series of most distressing sensations. Dr. Willan confines his attention to one case of the disorder, which may be considered as idiopathic, and which usually affects women soon after the cessation of the catamenia. It chiefly occurs in those who are of the phlegmatic temperament and inclined to corpulency. Its seat is the labia pudendi, and entrance to the vagina. It is often accompanied with an appearance of tension or fulness of those parts, and sometimes with inflamed itching papulæ on the labia and mons veneris. The distress arising from a strong and almost perpetual itching in the above situation, may be easily imagined. In order to allay it in some degree, the sufferers have frequent recourse to friction, and to cooling applications: whence they are necessitated to forego the enjoyment of society. An excitement of venereal sensations also takes place from the constant direction of the mind to the parts affected, as well as from the means employed to procure alleviation. The complicated distress thus arising, renders existence almost insupportable, and often produces a state of mind bordering on phrensy.

Deep ulcerations of the parts seldom take place in the prurigo pudendi; but the appearance of aphthæ on the labia and nymphæ, is by no means unusual. From intercourse with females under these circumstances, men are liable to be affected with aphthous ulcerations on the glans, and inside of the præputium, which prove troublesome for a length of time, and often excite an alarm, being mistaken for chancres.

Women, after the fourth month of their pregnancy, often suffer greatly from the prurigo pudendi, attended with aphthæ. These, in a few cases, have been succeeded by extensive ulcerations, which destroyed the nymphæ, and produced a fatal hectic: such instances, are, however, extremely rare. The complaint has, in general, some intervals or remissions; and the aphthæ usually disappear soon after delivery, whether at the full time, or by a miscarriage.

PRURI'TUS. (From *prurio*, to itch.) See *Prurigo.*

PRUSSIATES. Salts formed by the union of the prussic acid, or colouring matter of Prussian blue, with different bases; thus, *prussiate of potash*, &c.

PRUSSIC ACID. An acid obtained from Prussian blue, in which it is combined with oxyde of iron. Its compounds with bases are termed Prussiates.

PSALLOI'DES. (From ψαλλος, a stringed instrument, and ειδος, a likeness; because it appears as if stringed like a dulcimer.) Applied by the antients to the inner surface of the fornix of the brain.

PSALTE'RIUM. (A harp; because it is marked with lines that give it the appearance of a harp.) *Lyra.* The medullary body that unites the posterior crura of the fornix of the brain.

Psammi'smus. (From ψαμμος, sand.) An application of hot sand to any part of the body.

Psammo'des. (From ψαμμος, sand.) Applied to urine which deposits a sandy sediment.

PSELLI'SMUS. (From ψελλιζω, to have a hesitation of speech.) *Psellotis.* Defect of speech. A genus of disease in the Class *Locales*, and Order *Dyscinesiæ*, of Cullen.

Psello'tis. See *Psellismus.*

PSEUDO. (Ψευδης, false.) Spurious; prefixed to many substances which are only fictitious imitations; as *pseudamomum*, a spurious kind of amomum, &c.

Pseuda'corus. See *Iris pseudacorus.*

PSEUDOBLE'PSIS. (From ψευδης, false, and βλεψις, sight.) *Phantasma. Suffusio.* Imaginary vision of objects. A genus of disease in the Class *Locales*, and Order *Dysæsthesiæ*, of Cullen; characterised by depraved sight, creating objects, or representing them different from what they are. Species:

1. *Pseudoblepsis imaginaria*, in which objects are perceived that are not present.

2. *Pseudoblepsis mutans*, in which objects that are present appear somewhat changed.

Pseudopyre'thrum. See *Achillea ptarmica.*

PSI'DIUM. The name of a genus of plants in the Linnæan system.

Psi'dium pomi'ferum. The systematic name of the apple guava. This plant, and the *pyriferum*, bear fruits, the former like apples, the latter like pears. The apple kind is most cultivated in the Indies, on account of the pulp having a fine acid flavour, whereas the pear species is sweet, and therefore not so agreeable in warm climates. Of the inner pulp of either, the inhabitants make jellies; and of the outer rind they make tarts, marmalades, &c. The latter they also stew and eat with milk, and prefer them to any other stewed fruits. They have an astringent quality, which exists also in every part of the tree, and abundantly in the leaf-buds, which are occasionally boiled with barley and liquorice, as an excellent drink against diarrhœas. A simple decoction of the leaves, used as a bath, is said to cure the itch, and most cutaneous eruptions.

Psi'dium pyri'ferum. The systematic name of the pear guava. See *Psidium pomiferum.*

Psilo'thra. (From ψιλοω, to denudate.) Applications to remove the hair.

Psilo'thrum. (From ψιλοω, to depilate; so called because it was used to remove the hair. The white briony.

Psimmy'thium. (From ψιω to smooth; so called because of its use as a cosmetic.) Cerusse, or white lead.

PSO'Æ. (ψοαι, the loins.) *Alopeces. Nefrometræ. Neurometeres.* The name of two pair of muscles in the loins.

PSOAS ABSCESS. See *Lumbar abscess.*

PSO'AS MA'GNUS. (From ψοαι, the loins, because it is situated in the loins.) *Psoas, seu lumbaris internus*, of Winslow. *Pre-lumbo-trochantin*, of Dumas. This is a long, thick, and very considerable muscle, situated close to the fore-part and sides of the lumbar vertebræ. It arises from the bodies of the last vertebra of the back, and of all the lumbar vertebræ laterally, as well as from the anterior surfaces of their transverse processes by distinct tendinous and fleshy slips, that are gradually collected into one mass, which becomes thicker as it descends, till it reaches the last of the lumbar vertebræ, where it grows narrower again, and, uniting its outer and posterior edge, (where it begins to become tendinous) with the iliacus internus, descends along with that muscle under the ligamentum Fallopii, and goes to be inserted tendinous at the bottom of the trochanter minor of the os femoris, and fleshy into the bone a little below that process. Between the tendon of this muscle and the ischium, we find a considerable bursa mucosa. This muscle, at its origin, has some connection with the diaphragm, and likewise with the quadratus lumborum. It is one of the most powerful flexors of the thigh forwards, and may likewise assist in turning it outwards. When the inferior extremity is fixed, it may help to bend the body forwards, and in an erect posture, it greatly assists in preserving the equilibrium of the trunk upon the upper part of the thigh.

PSO'AS PA'RVUS. *Pre-lumbo-pubien*, of Dumas. This muscle, which was first described by Riolanus, is situated upon the psoas magnus, at the anterior part of the loins. The psoas parvus arises thin and fleshy from the side of the uppermost vertebra of the loins, and sometimes also from the lower edge of the last vertebra of the back, and from the transverse processes of each of these vertebræ; it then extends over part of the psoas magnus, and terminates in a thin flat tendon, which is inserted into that part of the brim of the pelvis, where the os pubis joins the ilium. From this tendon a great number of fibres are sent off, which form a thin fascia, that covers part of the psoas magnus and iliacus internus, and gradually loses itself on the fore-part of the thigh. In the human body this muscle is very often wanting; but in a dog, according to Douglas, it is never deficient. Riolanus was of opinion, that it occurs oftener in men than in women; Winslow asserts just the contrary; but the truth seems to be, that it is as often wanting in one sex as in the other. Its use seems to be to assist the psoas magnus in bending the loins forwards; and when we are lying upon our back, it may help to raise the pelvis.

Pso'as si've lumba'ris inte'rnus. See *Psoas magnus*.

PSO'RA. Ψωρα. *Scabies.* The itch. A genus of disease in the Class *Locales*, and Order *Dialyses*, of Cullen; appearing first on the wrists and between the fingers in small pustules with watery heads. It is contagious.

PSORI'ASIS. (From ψωρα, the itch.) The disease to which Dr. Willan gives this title is characterised by a rough and scaly state of the cuticle, sometimes continuous, sometimes in separate patches, of various sizes, but of an irregular figure, and for the most part accompanied with rhagades or fissures of the skin. From the lepra it may be distinguished, not only by the distribution of the patches, but also by its cessation and recurrence at certain seasons of the year, and by the disorder of the constitution with which it is usually attended. Dr. Willan gives the following varieties:

1. *Psoriasis guttata*. This complaint appears in small, distinct, but irregular patches of laminated scales, with little or no inflammation round them. The patches very seldom extend to the size of a sixpence. They have neither an elevated border, nor the oval or circular form by which all the varieties of lepra are distinguished; but their circumference is sometimes angular, and sometimes goes into small serpentine processes. The scale formed upon each of them is thin, and may be easily detached, leaving a red, shining base. The patches are often distributed over the greatest part of the body, but more particularly on the back part of the neck, the breasts, arms, loins, thighs, and legs. They appear also upon the face, which rarely happens in lepra. In that situation they are red and more rough than the adjoining cuticle, but not covered with scales. The psoriasis guttata often appears on children in a sudden eruption, attended with a slight disorder of the constitution, and spreads over the body within two or three days. In adults it commences with a few scaly patches on the extremities, proceeds very gradually, and has a longer duration than in children. Its first occurrence is usually in the spring season, after violent pains in the head, stomach, and limbs. During the summer it disappears spontaneously, or may be soon removed by proper applications, but it is apt to return again early in the ensuing spring, and continues so to do for several successive years. When the scales have been removed, and the disease is about to go off, the small patches have a shining appearance, and they retain a dark red, intermixed with somewhat of a bluish colour, for many days, or even weeks, before the skin is restored to its usual state. In the venereal disease there is an eruption which very much resembles the psoriasis guttata, the only difference being a slighter degree of scaliness, and a different shade of colour in the patches, approaching to a livid red, or very dark rose colour. The patches vary in their extent, from the section of a pea, to the size of a silver penny, but are not exactly circular. They rise at first very little, if at all, above the cuticle. As soon, however, as the scales appear on them, they become sensibly elevated; and sometimes the edge or circumference of the patch is higher than the little scales in its centre. This eruption is usually seen upon the forehead, breast, between the shoulders, or in the inside of the fore-arms, in the groins, about the inside of the thighs, and upon the skin covering the lower part of the abdomen. The syphilitic psoriasis guttata is attended with, or soon followed by, an ulceration of the throat. It appears about six or eight weeks after a chancre has been healed by an ineffectual course of mercury. A similar appearance takes place at nearly the same period, in some cases where no local symptoms had been noticed. When a venereal sore is in a discharging state, this eruption, or other secondary symptoms, often appear much later than the period above mentioned. They may also be kept back three months, or even longer, by an inefficient application of mercury. If no medicines be employed, the syphilitic form of the psoriasis guttata will proceed during several months, the number of the spots increasing, and their bulk being somewhat enlarged, but without any other material alteration.

2. The *Psoriasis diffusa* spreads into large patches irregularly circumscribed, reddish, rough, and chappy, with scales interspersed. It commences, in general, with numerous minute asperities, or elevations of the cuticle, more perceptible by the touch than by sight. Upon these small distinct scales are soon after formed, adhering by a dark central point, while their edges may be seen white and detached. In the course of two or three weeks all the intervening cuticle becomes rough and chappy, appears red, and raised, and wrinkled, the lines of the skin sinking into deep furrows. The scales which form among them are often slight, and repeatedly exfoliate. Sometimes, without any previous eruption of papulæ, a large portion of the skin becomes dry, harsh, cracked, reddish, and scaly, as above described. In other cases, the disorder commences with separate patches of an uncertain form and size, some of them being small, like those in the psoriasis guttata, some much larger. The patches gradually expand till they become confluent, and nearly cover the part or limb affected. Both the psoriasis guttata and diffusa likewise occur as a sequel of the lichen simplex. This transition takes place more certainly after frequent returns of the lichen. The parts most affected by psoriasis diffusa are the cheeks, chin, upper eyelids, and corners

of the eyes, the temples, the external ear, the neck, the fleshy parts of the lower extremities, and the fore-arm, from the elbow to the back of the hand, along the supinator muscle of the radius. The fingers are sometimes nearly surrounded with a loose scaly incrustation; the nails crack and exfoliate superficially. The scaly patches likewise appear, though less frequently, on the forehead and scalp, on the shoulders, back, and loins, on the abdomen, and instep. This disease occasionally extends to all the parts abovementioned at the same time; but, in general, it affects them successively, leaving one place free, and appearing in others; sometimes again returning to its first situation. The psoriasis diffusa is attended with a sensation of heat, and with a very troublesome itching, especially at night. It exhibits small, slight, distinct scales, having less disposition than the lepra to form thick crusts. The chaps or fissures of the skin, which usually make a part of this complaint, are very sore and painful, but seldom discharge any fluid. When the scales are removed by frequent washing, or by the application of unguents, the surface, though raised and uneven, appears smooth and shining; and the deep furrows of the cuticle are lined by a slight scaliness. Should any portion of the diseased surface be forcibly excoriated, there issues out a thin lymph, mixed with some drops of blood, which slightly stains and stiffens the linen, but soon concretes into a thin dry scab; this is again succeeded by a white scaliness, gradually increasing, and spreading in various directions. As the complaint declines, the roughness, chaps, scales, &c. disappear, and a new cuticle is formed, at first red, dry, and shrivelled, but which, in two or three weeks, acquires the proper texture. The duration of the psoriasis diffusa is from one to four months. If, in some constitutions, it does not then disappear, but becomes, to a certain degree, permanent, there is, at least, an aggravation or extension of it, about the usual periods of its return. In other cases, the disease, at the vernal returns, differs much as to its extent, and also with respect to the violence of the preceding symptoms. The eruption is, indeed, often confined to a single scaly patch, red, itching, and chapped, of a moderate size, but irregularly circumscribed. This solitary patch is sometimes situated on the temple, or upper part of the cheek, frequently on the breast, the calf of the leg, about the wrist, or within and a little below the elbow joint, but especially at the lower part of the thigh, behind. It continues in any of these situations several months, without much observable alteration. The complaint denominated with us the bakers' itch, is an appearance of psoriasis diffusa on the back of the hand, commencing with one or two small, rough, scaly patches, and finally extending from the knuckles to the wrist. The rhagades, or chaps and fissures of the skin, are numerous about the knuckles and ball of the thumb, and where the back of the hand joins the wrist. They are often highly inflamed, and painful, but have no discharge of fluid from them. The back of the hand is a little raised or tumefied, and, at an advanced period of the disorder, exhibits a reddish, glossy surface, without crusts or numerous scales. However, the deep furrows of the cuticle are, for the most part, whitened by a slight scaliness. This complaint is not general among bakers; that it is only aggravated by their business, and affects those who are otherwise disposed to it, may be collected from the following circumstances: 1. It disappears about Midsummer, and returns in the cold weather at the beginning of the year; 2. Persons constantly engaged in the business, after having been once affected with the eruption, sometimes enjoy a respite from it for two or three years; 3. When the business is discontinued, the complaint does not immediately cease. The grocers' itch has some affinity with the bakers' itch, or tetter; but, being usually a pustular disease at its commencement, it properly belongs to another genus. Washerwomen, probably from the irritation of soap, are liable to be affected with a similar scaly disease on the hands, and arms, sometimes on the face and neck, which, in particular constitutions, proves very troublesome, and of long duration.

3. The *Psoriasis gyrata* is distributed in narrow patches or stripes, variously figured; some of them are nearly longitudinal; some circular, or semicircular with vermiform appendages; some are tortuous, or [serpentine; others like earth-worms or leeches: the furrows of the cuticle being deeper than usual, make the resemblance more striking, by giving to them an annulated appearance. There is a separation of slight scales from the diseased surface, but no thick incrustations are formed. The uniform disposition of these patches is singular: I have seen a large circular one situated on each breast above the papillæ; and two or three others of a serpentine form, in analogous situations along the sides of the chest. The back is often variegated in like manner, with convoluted tetters, similarly arranged on each side of the spine. They likewise appear, in some cases, on the arms and thighs, intersecting each other in various directions. A slighter kind of this complaint affects delicate young women and children in small scaly circles or rings, little discoloured; they appear on the cheeks, neck, or upper part of the breast, and are mostly confounded with the herpetic, or pustular ringworm. The psoriasis gyrata has its remissions and returns, like the psoriasis diffusa; it also exhibits, in some cases, patches of the latter disorder on the face, scalp, or extremities, while the trunk of the body is

chequered with the singular figures above-described.

4. *Psoriasis palmaria.* One very obstinate species of tetter is nearly confined to the palm of the hand. It commences with a small, harsh, or scaly patch, which gradually spreads over the whole palm, and sometimes appears in a slighter degree on the inside of the fingers and wrist. The surface feels rough from the detached and raised edges of the scaly laminæ; its colour often changes to brown, or black, as if dirty; yet the most diligent washing produces no favourable effect. The cuticular furrows are deep, and cleft at the bottom longitudinally, in various places, so as to bleed on stretching the fingers. A sensation of heat, pain, and stiffness in the motions of the hand, attends this complaint. It is worst in winter or spring, and occasionally disappears in autumn or summer, leaving a soft, dark red cuticle; but many persons are troubled with it for a series of years, experiencing only very slight remissions. Every return or aggravation of it is preceded by an increase of heat and dryness, with intolerable itching. Shoemakers have the psoriasis palmaria locally, from the irritation of the wax they so constantly employ. In braziers, tinmen, silversmiths, &c. the complaint seems to be produced by handling cold metals. A long predisposition to it from a weak, languid, hectical state of the constitution may give effect to different occasional causes. Dr. Willan has observed it in women after lying-in; in some persons it is connected or alternates with arthritic complaints. When the palms of the hands are affected as above stated, a similar appearance often takes place on the soles of the feet; but with the exception of rhagades or fissures, which seem less liable to form there, the feet being usually kept warm and covered. Sometimes, also, the psoriasis palmaria is attended with a thickness of the præputium, with scaliness and painful cracks. These symptoms at last produce a phimosis, and render connubial intercourse difficult or impracticable; so great, in some cases, is the obstinacy of them, that remedies are of no avail, and the patient can only be relieved by circumcision. This affection of the præputium is not exactly similar to any venereal appearance, but rhagades or fissures, and indurated patches within the palm of the hand, take place in syphilis, and somewhat resemble the psoriasis palmaria. The venereal patches are, however, distinct, white, and elevated, having nearly the consistence of a soft corn. From the rhagades there is a slight discharge, very offensive to the smell. The soles of the feet are likewise, in this case, affected with the patches, not with rhagades. When the disease yields to the operation of mercury, the indurated portions of cuticle separate, and a smooth new cuticle is found formed underneath. The fingers and toes are not affected with the patches, &c. in venereal cases.

5. *Psoriasis labialis.* The psoriasis sometimes affects the prolabium without appearing on any other part of the body. Its characteristics are, as usual, scaliness, intermixed with chaps and fissures of the skin. The scales are of a considerable magnitude, so that their edges are often loose, while the central points are attached, a new cuticle gradually forms beneath the scales, but is not durable. In the course of a few hours it becomes dry, shrivelled, and broken; and, while it exfoliates, gives way to another layer of tender cuticle, which soon, in like manner, perishes. These appearances should be distinguished from the light chaps and roughness of the lips produced by very cold or frosty weather, but easily removed. The psoriasis labialis may be a little aggravated by frost or sharp winds, yet it receives no material alleviation from an opposite temperature. It is not, indeed, confined within any certain limit, or period of duration, having, in several instances, been protracted through all the seasons. The under lip is always more affected than the upper; and the disease takes place more especially in those persons whose lips are full and prominent.

6. *Psoriasis scrotalis.* The skin of the scrotum may be affected in the psoriasis diffusa like other parts of the surface of the body; but sometimes a roughness and scaliness of the scrotum appears as an independent complaint attended with much heat, itching, tension, and redness. The above symptoms are succeeded by a hard, thickened, brittle texture of the skin, and by painful chaps or excoriations, which are not easy to be healed. This complaint is sometimes produced under the same circumstances as the prurigo scroti, and appears to be in some cases a sequel of it. A species of the psoriasis scrotalis likewise occurs in the lues venerea, but merits no particular attention, being always combined with other secondary symptoms of the disease.

7. *Psoriasis infantilis.* Infants between the ages of two months and two years, are occasionally subject to the dry tetter. Irregular, scaly patches, of various sizes, appear on the cheeks, chin, breast, back, nates, and thighs. They are sometimes red, and a little rough, or elevated; sometimes excoriated, then again covered with a thin incrustation; and lastly intersected by chaps or fissures. The general appearances nearly coincide with those of the psoriasis diffusa; but there are several peculiarities in the tetters of infants which require a distinct consideration.

8. The *Psoriasis inveterata* is characterised by an almost universal scaliness, with a harsh, dry, and thickened state of the skin. It commences from a few irregular, though distinct patches on the extremities. Others

appear afterwards on different parts, and, becoming confluent, spread at length over all the surface of the body, except a part of the face, or sometimes the palms of the hands, and soles of the feet. The skin is red, deeply furrowed, or wrinkled, stiff and rigid, so as somewhat to impede the motion of the muscles, and of the joints. So quick, likewise, is the production and separation of scales, that large quantities of them are found in the bed on which a person affected with the disease has slept. They fall off in the same proportion by day, and being confined within the linen, excite a troublesome and perpetual itching.

Pso′rica. (From ψωρα, the itch.) Medicines to cure the itch.

PSOROPHTHA′LMIA. (From ψωρα, the itch, and οφθαλμος, an eye.) An inflammation of the eye-lids, attended with ulcerations, which itch very much. By psorophthalmy Mr. Ware means a case, in which the inflammation of the eye-lids is attended with an ulceration of their edges, upon which a glutinous matter lodges, and becomes hard, so that in sleep, when they have been long in contact, they become so adherent, that they cannot be separated without pain. The proximate cause is an acrimony deposited in the glands of the eye-lids. The species of the psorophthalmia are,

1. *Psorophthalmia crustosa*, which forms dry or humid crusts in the margins of the eyelids.
2. *Psorophthalmia herpetica*, in which small papulæ, itching extremely, and terminating in scurf, are observed.

Psychago′gica. (From ψυχη, the mind, and αγω, to move.) Medicines which recover in syncope or apoplexy.

Psycho′tria eme′tica. (From ψυχος, cold, because it grows in cold places.) See *Callicocca ipecacuanha*.

Psycho′trophum. (From ψυχος, cold, and τρεφω, to nourish; so called because it grows in places exposed to the cold.) The herb betony.

Psychrolu′trum. (From ψυχος, cold, and λουω, to wash.) A cold bath.

Psy′chtica. (From ψυχω, to refrigerate.) Refrigerating medicines.

PSYDRA′CIA. (From ψυχος, cold.) Red and somewhat elevated spots, which soon form broad and superficial vesicles, such as those produced by the stinging-nettle, the bites of insects, &c. See *Pustule*.

Psylli′um. (From ψυλλος, a flea; so called because it was thought to destroy fleas.) See *Plantago psyllium*.

Ptarmica. (From πταιρω, to sneeze; so called because it irritates the nose, and provokes sneezing.) Sneezewort. See *Achillea ptarmica*.

PTE′RIS. The name of a genus of plants in the Linnæan system. Class, *Cryptogamia*. Order, *Filices*.

Pte′ris aquili′na. (From πτερον, a wing; so called from the likeness of its leaves to wings, and *aquilina*, from *aquila*, an eagle, from its resemblance to an eagle's wings.) The systematic name of the common brake, or female fern. *Filix fœmina*. The plant which is thus called in the pharmacopœias, is not the *Polypodium filix fœmina*, but the *Pteris aquilina; frondibus supradecompositis, foliolis pinnatis, pinnis lanceolatis, infimis, pinnatifidis, superioribus minoribus*, of Linnæus. The root is esteemed as an anthelmintic, and is supposed to be as efficacious in destroying the tapeworm as the root of the male fern.

PTEROCA′RPUS. (From πτερον, a wing, and καρπος, fruit.) The name of a genus of plants in the Linnæan system.

Pteroca′rpus santa′linus. The systematic name of the red saunders tree. *Santalum rubrum*. There is some reason to believe that several red woods, capable of communicating this colour to spirituous liquors, are sold as red saunders; but the true officinal kind appears, on the best authority, to be of this tree, which is extremely hard, of a bright garnet red colour, and bears a fine polish. It is only the inner substance of the wood that is used as a colouring matter, and the more florid red is mostly esteemed. On being cut, it is said to manifest a fragrant odour, which is more especially observed in old trees. According to Lewis, this wood "is of a dull red, almost blackish colour on the outside, and a deep brighter red within; its fibres are now and then curled, as in knots. It has no manifest smell, and little or no taste, even of extracts made from it with water, or with spirit, the taste is not considerable.

To watery liquors it communicates only a yellowish tinge, but to rectified spirit a fine deep red. A small quantity of an extract made with this menstruum, tinges a large one of fresh spirit of the same colour; though it does not, like most other resinous bodies, dissolve in expressed oils. Of distilled oils, there are some, as that of lavender, which receive a red tincture from the wood itself, and from its resinous extract, but the greater number do not. Red saunders has been esteemed as a medicine; but its only use attaches to its colouring property. The juice of this tree, like that of some others, affords a species of sanguis draconis.

PTERY′GIUM. (Πτερυξ, a wing.) A membranous excrescence which grows upon the internal canthus of the eye chiefly, and expands itself over the albuginea and cornea towards the pupil. It appears to be an extension or prolongation of the fibres and vessels of the caruncula lachrymalis, or semilunar membrane, appearing like a wing. The species of pterygium are four:

1. *Pterygium tenue*, seu *ungula*, is a pellucid pellicle, thin, of a cineritious colour, and unpainful; growing out from the caruncula lachrymalis, or membrana semilunaris.

2. *Pterygium crassum*, seu *pannus*, differs from the ungula by its thickness, red colour, and fulness of the red vessels on the white of the eye, and it stretches over the cornea like fasciculi of vessels.

3. *Pterygium malignum*, is a pannus of various colours, painful, and arising from a cancerous acrimony.

4. *Pterygium pingue*, seu *pinguicula*, is a molecule like lard or fat, soft, without pain, and of a light yellow colour, which commonly is situated in the external angle of the eye, and rarely extends to the cornea; but often remains through life.

PTERYGO. Names compounded of this word belong to muscles which are connected with the pterygoid process of the sphenoid bone; as *pterygo-pharyngeus*, &c.

Pterygo-pharynge'us. See *Constrictor pharyngis superior.*

Pterygo-staphili'nus exte'rnus. See *Levator palati.*

PTERYGOID PROCESS. (*Pterygoides*, from πτερυξ, a wing, and ειδος, resemblance.) A wing-like process of the sphenoid bone.

Pterygoide'um os. See *Ethmoid bone.*

PTERYGOIDE'US EXTE'RNUS. (*Pterygoideus*, from its belonging to the processus pterygoides.) *Pterygoideus minor*, of Winslow. *Pterygo-colli-maxillaire*, of Dumas. A muscle placed as it were, horizontally along the basis of the scull, between the pterygoid process and the condyle of the lower jaw. It usually arises by two distinct heads; one of which is thick, tendinous, and fleshy, from the outer wing of the pterygoid process of the os sphenoides, and from a small part of the os maxillare adjoining to it; the other is thin and fleshy, from a ridge in the temporal process of the sphenoid bone, just behind the slit that transmits the vessels to the eye. Sometimes this latter origin is wanting, and, in that case, part of the temporal muscle arises from this ridge. Now and then it affords a common origin to both these muscles. From these origins the muscle forms a strong fleshy belly, which descends almost transversely outwards and backwards, and is inserted tendinous and fleshy, into a depression in the forepart of the condyloid process of the lower jaw, and into the anterior surface of the capsular ligament that surrounds the articulation of that bone. All that part of this muscle, which is not hid by the pterygoideus internus, is covered by a ligamentous expansion, which is broader than that belonging to the pterygoideus internus, and originates from the inner edge of the glenoid cavity of the lower jaw, immediately before the styloid process of the temporal bone, and extends obliquely downwards, forwards, and outwards, to the inner surface of the angle of the jaw. When these muscles act together, they bring the jaw horizontally forwards. When they act singly, the jaw is moved forwards, and to the opposite side. The fibres that are inserted into the capsular ligament, serve likewise to bring the moveable cartilage forwards.

PTERYGOIDE'US INTE'RNUS. *Pterygoideus major*, of Winslow. *Pterygo-anguli-maxillaire*, of Dumas. This muscle arises tendinous and fleshy from the whole inner surface of the external ala of the pterygoid process, filling all the space between the two wings; and from that process of the os palati that makes part of the pterygoid fossa. From thence growing larger, it descends obliquely downwards, forwards, and outwards, and is inserted, by tendinous and fleshy fibres, into the inside of the lower jaw, near its angle. This muscle covers a great part of the *pterygoideus externus*; and along its posterior edge we observe a ligamentous band, which extends from the back part of the styloid process to the bottom of the angle of the lower jaw. The use of this muscle is to raise the lower jaw, and to pull it a little to one side.

Pterygoide'us ma'jor. See *Pterygoideus internus.*

Pterygoide'us mi'nor. See *Pterygoideus externus.*

Ptilo'sis. (From πτιλος, bald.) See *Madarosis.*

Pti'sana. (From πτισσω, to decorticate, bruise or pound.) *Ptissana.* Barley deprived of its husks, pounded and made into balls.

PTO'SIS. (From πιπτω, to fall.) *Blepharoptosis.* An inability of raising the upper eye-lid. The affection may be owing to several causes, the chief of which are a redundance of the skin on the eye-lid; a paralytic state of the levator muscle, and a spasm of the orbicularis.

PTO'SIS I'RIDIS. *Prolapsus iridis.* A prolapsus of the iris through a wound of the cornea. It is known by a blackish tubercle, which projects a little from the cornea in various forms. The species of the ptosis of the iris are,

1. *Ptosis recens*, or a recent ptosis from a side wound of the cornea, as that which happens, though rarely, in or after the extraction of the cataract.

2. *Ptosis inveterata*, in which the incarcerated prolapsed iris is grown or attached to the wound or ulcer, and has become callous or indurated.

Ptyalago'ga. (From πτυαλον, spittle,

and αγω, to excite.) *Ptyasmagoga.* Medicines which promote a discharge of the saliva, or cause salivation.

Ptyali'smos. See *Ptyalismus.*

PTYALI'SMUS. (From πτυαλιζω, to spit.) A ptyalism or salivation, or increased secretion of saliva from the mouth.

Pty'alum. (From πτυω, to spit up.) The saliva or mucus from the bronchia.

Ptyasmago'ga. (From πτυασμα, sputum, and αγω, to expel.) See *Ptyalagoga.*

PU'BES. The external part of the organs of generation of both sexes, which after puberty is covered with hair.

PU'BIS OS. A separate bone of the fœtal pelvis. See *Innominatum os.*

PUDE'NDA. (From *pudor*, shame.) The parts of generation.

Pudenda'gra. (From *pudenda*, the private parts, and αγρα, a seizure.) *Cedma.* A pain in the private parts. By some it is called the venereal disease. Others define it to be, pain or uneasiness in the genital parts of men or women, somewhat resembling a gonorrhœa, but without a dysuria. Dr. Beddoes asserts, in his essay on the Pudendagra, that it is distinct from the venereal disease, and also, that it is proper to women, but that a woman labouring under it, can communicate some inflammatory symptoms to the penis of a man who cohabits with her.

PUDE'NDUM MULIE'BRE. The female parts of generation.

PUDICAL ARTERY. *Arteria pudica vel pudenda.* Pudendal artery. A branch of the internal iliac distributed on the organs of generation.

Pueri'lis mo'rbus. The epilepsy.

PUERPERAL FEVER. Childbed-fever. Cullen considers this disease as a species of continued fever.

Puff ball. See *Lycoperdon.*

PUGI'LLUS. (From *pugnus*, the fist.) *Dragmis.* A pugil. The eighth part of a handful.

PULE'GIUM. (From *pulex*, a flea; because the smell of its leaves, burnt, destroys fleas.) See *Mentha pulegium.*

Pule'gium cervi'num. Hart's pennyroyal. *Mentha cervina*, of Linnæus.

Pulica'ria. (From *pulex*, a flea; so named because it was thought to destroy fleas if hung in a chamber.) See *Plantago psyllium.*

PU'LMO. (Plin. πνευμων. Attice πλευμων, *unde, per metathesin pulmo.*) The lung. See *Lung.*

PULMONA'RIA. (From *pulmo*, the lungs; so called because of its virtues in affections of the lungs.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Lungwort.

Pulmona'ria arbo'rea. See *Lichen pulmonarius.*

Pulmona'ria macula'ta. See *Pulmonaria officinalis.*

Pulmona'ria officina'lis. The systematic name of the spotted lung-wort. *Pulmonaria maculata. Symphitum maculosum.* Jerusalem cowslips, Jerusalem sage. This plant is rarely found to grow wild in England; but is very commonly cultivated in gardens, where its leaves become broader, and approach more to a cordate shape. The leaves, which are the part medicinally used, have no peculiar smell; but, in their recent state, manifest a slightly adstringent and mucilaginous taste; hence it seems not wholly without foundation that they have been supposed to be demulcent and pectoral. They have been recommended in hæmoptoes, tickling coughs, and catarrhal defluxions upon the lungs. The name pulmonaria, however, seems to have arisen rather from the speckled appearance of these leaves resembling that of the lungs, than from any intrinsic quality which experience discovered to be useful in pulmonary complaints.

Pulmonary consumption. See *Phthisis.*

PULMONARY VESSELS. The pulmonary artery, *arteria pulmonalis*, arises from the right ventricle of the heart, and soon divides into the right and left, which ramify throughout the lungs, and form a beautiful net-work on the air vesicles, where they terminate in the veins, *venæ pulmonales*, whose branches at length form four trunks, which empty themselves into the left auricle of the heart.

PULMO'NIA. (From *pulmo*, the lungs.) An inflammation of the lungs.

Pulmo'nica. (From *pulmo*, the lung.) Medicines for the lungs.

Pulsati'lla ni'gricans. (From *pulso*, to beat about; so called from its being perpetually agitated by the air.) See *Anemone pratensis.*

PULSE. *Pulsus.* The beating of the artery at the wrist is termed the pulse. It depends upon the impulse given to the blood by the heart; hence physicians feel the pulse, to ascertain the quickness or tardiness of the blood's motion, the strength of the heart, &c.

Pulsile'gium. (From *pulsus*, the pulse, and *lego*, to tell.) An instrument for measuring the pulse.

Pulvi'nar. (From *pulvis*, dust or chaff, with which they are filled.) A medicated cushion.

Pulvina'rium. See *Pulvinar.*

PU'LVIS. (*-veris*, m.) A powder. *Pulvinarium.* This form of medicine is either coarse or very fine, simple or compound. In the compounded powders the intimate and complete admixture of the several ingredients, and more especially in those to which any of the more active substances, as opium, scammony, &c. are added, cannot be too strongly recommended, and for this purpose it may be proper to pass them, after they are mixed mechanically, through a fine sieve.

Pu′lvis a′loes compo′situs. Compound powder of aloes. Formerly called *pulvis aloes cum guaiaco.* " Take of extract of spiked aloe, an ounce and half; guaiacum resin, an ounce; compound powder of cinnamon, half an ounce. Powder the extract of aloe and guaiacum resin separately; then mix them with the compound powder of cinnamon." The dose is from gr. x. to ℈j. It is a warm aperient, laxative powder, calculated for the aged, and those affected with dyspeptic gout, attended with costiveness and spasmodic complaints of the stomach and bowels.

Pu′lvis a′loes cum cane′lla. A cathartic, deobstruent powder, possessing stimulating and aloetic properties omitted in the last London Pharmacopœia, as rather suited to the purpose of extemporaneous prescription.

Pu′lvis a′loes cum fe′rro. This possesses aperient and deobstruent virtues; and is mostly given in chlorosis and constipation. In the London Pharmacopœia this prescription is omitted for the same reason as pulvis aloes cum canella.

Pu′lvis a′loes cum guai′aco. See *Pulvis aloes compositus.*

Pu′lvis antimonia′lis. See *Antimonialis pulvis.*

Pu′lvis aroma′ticus. See *Pulvis cinnamomi compositus.*

Pu′lvis ceru′ssæ compo′situs. This is mostly used in the form of collyrium, lotion, or injection, as a mucilaginous sedative.

Pu′lvis chela′rum ca′ncri compo′situs. An antacid and adstringent powder, mostly given to children with diarrhœa and acidity of the primæ viæ.

Pu′lvis cinnamo′mi compo′situs. Compound powder of cinnamon. Formerly called *pulvis aromaticus : species aromatica : species diambræ sine odoratis.* " Take of cinnamon bark, two ounces; cardamom-seeds, an ounce and half; ginger-root, an ounce; long pepper, half an ounce. Rub them together, so as to make a very fine powder." The dose is from five to ten grains. An elegant stimulant, carminative, and stomachic powder.

Pulvis contraje′rvæ compo′situs. " Take of contrajerva root powdered, five ounces; prepared shells, a pound and half. Mix." A febrifuge diaphoretic, mostly given in the dose of from one to two scruples in slight febrile affections.

Pu′lvis co′rnu u′sti cum o′pio. Powder of burnt hartshorn with opium. *Pulvis opiatus.* " Take of hard opium, powdered, a drachm; hartshorn, burnt and prepared, an ounce; cochineal, powdered, a drachm. Mix." This preparation affords a convenient mode of exhibiting small quantities of opium, ten grains containing one of the opium. It is absorbent and anodyne.

Pu′lvis cre′tæ compo′situs. Compound powder of chalk. *Pulvis e bolo compositus sine opio. Species e scordio sine opio. Diascordium,* 1720. " Take of prepared chalk, half a pound; cinnamon bark, four ounces; tormentil root, acacia gum, of each three ounces; long pepper, half an ounce. Reduce them separately into a very fine powder, and then mix." The dose is from ʒss. to ʒi. An astringent, carminative, and stomachic powder exhibited in the cure of diarrhœa, pyrosis, and diseases arising from acidity of the bowels, inducing much pain.

Pu′lvis cre′tæ compo′situs cum o′pio. Compound powder of chalk with opium. *Pulvis e bolo compositus cum opio. Species e scordio cum opio.* " Take of compound powder of chalk, six ounces and a half. Hard opium, powdered, four scruples. Mix." The dose from one scruple to two. The above powder, with the addition of opium, in the proportion of one grain to two scruples.

Pu′lvis ipecacua′nhæ compo′situs. Compound powder of ipecacuanha. " Take of ipecacuanha root, powdered, hard opium powdered, of each a drachm; sulphate of potash, powdered, an ounce. Mix." A diaphoretic powder, similar to that of Dr. Dover, which gained such repute in the cure of rheumatisms, and other diseases arising from obstructed perspiration and spasm. The dose is from five grains to a scruple.

Pu′lvis ki′no compo′situs. Compound powder of kino. " Take of kino 15 drachms; cinnamon bark, half an ounce; hard opium, a drachm. Reduce them separately to a very fine powder; and then mix." The proportion of opium this astringent contains is one part to twenty. The dose is from five grains to a scruple.

Pu′lvis my′rrhæ compo′situs. A stimulant, antispasmodic, and emmenagogue powder, mostly exhibited in the dose of from fifteen grains to two scruples, in uterine obstructions and hysterical affections.

Pu′lvis opia′tus. See *Pulvis cornu usti cum opio.*

Pu′lvis scammo′neæ compo′situs. Compound powder of scammony. *Pulvis comitis Warwicensis.* " Take of scammony gum resin, hard extract of jalap, of each two ounces; ginger-root, half an ounce. Reduce them separately to a very fine powder, and then mix." From ten to fifteen grains or a scruple are exhibited as a stimulating cathartic.

Pu′lvis scammo′nii cum a′loe. A stimulating cathartic, in the dose of from ten to fifteen grains.

Pu′lvis scammo′nii cum calome′lane. A vermifugal cathartic, in the dose of from ten to fifteen grains.

Pu′lvis se′nnæ compo′situs. Compound powder of senna. *Pulvis diasennæ.* " Take of senna leaves, supertartrate of potash, of each two ounces; scammony gum resin, half an ounce; ginger-root, two drachms. Reduce the scammony gum resin separately, the rest together, to a very fine powder; and then mix." The dose is from one scruple to one drachm. A saline stimulating cathartic.

Pu'lvis tragaca'nthæ compo'situs. Compound powder of tragacanth. *Species diatragacanthæ frigidæ.* "Take of tragacanth, powdered, acacia gum, powdered, starch, of each an ounce and half, refined sugar, three ounces. Powder the starch and sugar together; then add the tragacanth and acacia gum, and mix the whole." Tragacanth is very difficultly reduced to powder. The dose is from ten grains to a drachm. A very useful demulcent powder, which may be given in coughs, diarrhœas, strangury, &c.

Pumpion, common. See *Cucurbita.*

PU'NCTA LACHRYMA'LIA. (From *punctum*, a point.) Lachrymal points. Two small orifices, one of which is conspicuous in each eyelid, at the extremity of the tarsus, near the internal canthus.

Pu'nctum au'reum. Formerly, when a hernia of the intestines was reduced by an incision made through the skin and membrana adiposa, quite down to the upper part of the spermatic vessels, a golden wire was fixed and twisted, so as to prevent the descent of any thing down the tunica vaginalis.

PU'NICA. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Monogynia.*

Pu'nica grana'tum. The systematic name of the pomegranate. *Granatum. Punica foliis lanceolatis, caule arboreo*, of Linnæus. The rind of the fruit and the flowers called *Balaustine flowers*, are the parts directed for medicinal use. In their smell there is nothing remarkable, but to the taste they are very adstringent, and have successfully been employed as such, in diseases both internal and external.

PUPIL. (*Pupilla*, from *pupa*, a babe; because it reflects the diminished image of the person who looks upon it like a puppet.) The round opening in the middle of the iris, in which we see ourselves in the eye of another.

PUPI'LLA, See *Pupil.*

PUPILLA'RIS MEMBRA'NA. (From *pupilla*, the pupil.) *Pupillæ velum.* A fine vascular membrane which in the fœtus of 5, 6, or 7 months grows across the part where the pupil is afterwards seen.

Purgame'ntum. A purge.

PURGATI'VA. *Purgantia. Cathartica. Catocathartica. Catoretica. Catoterica. Dejectoria. Alviduca.* Purgative medicines.

Purging flax. See *Linum catharticum.*

Purging-nut. See *Jatropha curcas.*

Pu'rpura a'lba. *Purpura rubra.* Many writers term the military fever, when the pustules are white, purpura alba, and when they are red purpura rubra.

Pu'rpura scorbu'tica. Petechial eruptions in scurvy.

Purslane. See *Portulaca.*

PUS. Matter. A whitish, bland, creamlike fluid, heavier than water, found in phlegmonous abscesses, or on the surface of sores. It is distinguished, according to its nature, into laudable or good pus, scrophulous, serous, and ichorous pus, &c.

Pus taken from an healthy ulcer, near the source of circulation, as on the arm or breast, Sir Everard Home observes, readily separates from the surface of the sore, the granulations underneath being small, pointed, and of a florid red colour, and has the following properties: it is nearly of the consistence of cream; is of a white colour; has a mawkish taste; and, when cold, is inodorous; but, when warm, has a peculiar smell. Examined in a microscope, it is found to consist of two parts, of globules, and a transparent colourless fluid; the globules are probably white, at least they appear to have some degree of opacity. Its specific gravity is greater than that of water. It does not readily go into putrefaction. Exposed to heat, it evaporates to dryness; but does not coagulate. It does not unite with water in the heat of the atmosphere, but falls to the bottom; yet, if kept in a considerable degree of heat, it rises and diffuses itself through the water, and remains mixed with it, even after having been allowed to cool, the globules being decomposed.

Pus varies in its appearance, according to the different circumstances which affect the ulcer that forms it; such as, the degree of violence of the inflammation, also its nature, whether healthy or unhealthy; and these depend upon the state of health, and strength of the parts yielding pus. These changes arise more from indolence and irritability, than from any absolute disease; many specific diseases, in healthy constitutions, producing no change in the appearance of the matter from their specific quality. Thus, the matter from a gonorrhœa, from the small-pox pustules, or the chicken-pock, has the same appearance, and seems to be made up of similar parts, consisting of globules floating in a transparent fluid, like common pus; the specific properties of each of these poisons being superadded to those of pus. Matter from a cancer may be considered as an exception; but a cancerous ulcer is never in a healthy state.

In indolent ulcers, whether the indolence arises from the nature of the parts, or the nature of the inflammation, the pus is made of globules and flaky particles, floating in a transparent fluid; and globules and flakes are in different proportions, according to the degree of indolence: this is particularly observable in scrophulous abscesses, preceded by a small degree of inflammation. That this flaky appearance is no part of true pus, is well illustrated by observing, that the proportion it bears to the globules is greatest where there is the least inflammation; and in those abscesses that sometimes occur, which have not been preceded by any inflammation at all, the contents are wholly made up of a curdy or flaky substance, of different degrees of consistence, which is not considered to be pus, from its not having the properties stated in the definition of that fluid.

The constitution and part must be in health to form good pus; for very slight changes in the general health are capable of producing an alteration in it, and even of preventing its being formed at all, and substituting in its place coagulating lymph.

This happens most readily in ulcers in the lower extremities, owing to the distance of the parts from the source of the circulation, rendering them weaker. And it is curious to observe the influence that distance alone has upon the appearance of pus.

Pus differs from chyle in its globules being larger, not coagulating by exposure to the air, nor by heat, which those of chyle do.

The pancreatic juice contains globules, but they are much smaller than those of pus.

Milk is composed of globules, nearly of the same size as those of pus, but much more numerous. Milk coagulates by runnet, which pus does not; and contains oil and sugar, which are not to be discovered in pus.

The cases in which pus is formed are, properly speaking, all reducible to one, which is, the state of parts consequent to inflammation. For, as far as we yet know, observes Sir E. Home, pus has in no instance been met with unless preceded by inflammation; and although, in some cases, a fluid has been formed independent of preceding inflammation, it differs from pus in many of its properties.

In considering the time required for the formation of pus, it is necessary to take notice of the periods which are found, under different circumstances, to intervene between a healthy or natural state of the parts, and the presence of that fluid after the application of some irritating substance to the skin.

In cases of wounds made into muscular parts, where blood-vessels are divided, the first process which takes place is the extravasation of red blood; the second is the exudation of coagulating lymph, which afterwards becomes vascular; and the third, the formation of matter, which last does not, in common, take place in less than two days; the precise time will, however, vary exceedingly, according to the nature of the constitution, and the state of the parts at the time.

If an irritating substance is applied to a cuticular surface upon which it raises a blister, pus will be formed in about twenty-fours hours.

PU'STULA. (Dim. of *pus*, matter.) See *Pustule*.

PUSTULE. (*Pustula*, a little pimple, from *pus*, corruption.) *Ecthyma. Eczema.* Dr. Willan defines a pustule to be an elevation of the cuticle, sometimes globate, sometimes conoidal in its form, and containing pus, or a lymph which is in general discoloured. Pustules are various in their size, but the diameter of the largest seldom exceeds two lines. There are many different kinds of pustules, properly distinguished in medical authors, by specific appellations, as 1. *Phlyzacium*, a small pustule containing pus, and raised on a hard, circular, inflamed base of a vivid red colour. It is succeeded by a thick, hard, dark-coloured scab. 2. *Psydracium*, according to Dr. Willan, a minute pustule, irregularly circumscribed, producing but a slight elevation of the cuticle, and terminating in a laminated scab. Many of these putules usually appear together, and become confluent. When mature they contain pus; and, after breaking, discharge a thin watery humour.

Pu'stula o'ris. The aphthæ.

PUTA'MEN. (From *puto*, to cut.) The bark or paring of any vegetable, as the walnut. See *Juglans*.

PUTREFACTION. Putrid fermentation. Putrefactive fermentation. That process by which a substance is decomposed and dissipated in the air in the form of putrid gas. Every living body, when deprived of life, performs a retrograde process, and becomes decomposed. This is called fermentation in vegetables, and putrefaction in animals. The same causes, the same agents, and the same circumstances, determine and favour the decomposition in vegetables and animals, and the difference of the products which are obtained, arises from the difference of the constituent parts of each. The requisites to this process are, 1. A certain degree of humidity. 2. The access of atmospheric air. 3. A certain degree of heat. See also *Fermentation*.

Putrid fever. A species of typhus. See *Typhus gravior*.

PYLORIC ARTERY. Arteria pylorica. A branch of the hepatic artery.

PYLO'RUS. (From πυλη, an entrance, and ουρος, a guard; because it guards, as it were, the entrance of the bowels.) *Janitor. Portorarium. Ostiarius.* The inferior aperture of the stomach, which opens into the intestines.

Pyopoe'tica. (From πυον, pus, and ποιεω, to make.) Suppurative medicines.

Pyorrhœ'a. (From πυον, pus, and ρεω, to flow.) A purulent discharge from the belly.

Pyotu'ria. (From πυον, pus, and ουρον, urine.) Pyuria. A mucous or purulent urine.

PYRAMIDA'LIS. (*Pyramidalis*, sc. *musculus*; from πυραμις, a pyramid.) Fallopius, who is considered as the first accurate describer of this muscle, gave it the name of *pyramidalis*, from its shape, hence it is called *pyramidalis Fallopii*, by Douglas. But Vesalius seems to have been acquainted with it, and to have described it as a part of the rectus. It is called *pyramidalis vel succenturiatus*, by Cowper. And *pubio-ombilical*, by Dumas. It is a very small muscle, situated at the bottom of the fore-part of the rectus, and is covered by the same aponeurosis that forms the anterior part of the sheath of that muscle. It arises, by short tendinous fibres, from the upper and fore-part of the os pubis. From this origin, which is seldom more than an inch in breadth, its fibres ascend somewhat obliquely, to be inserted into the linea alba, and inner edge of the rectus, commonly at about the distance of two inches from the pubes, and frequently at a greater or less distance, but always below the umbilicus. In some subjects the pyramidalis is wanting on one or both sides, and when this happens, the internal oblique is usually found to be of greater thickness at its lower part. Now and then, though rarely, there are two at one side, and only one at the other, and M. Sabatier has even seen two on each side. Fallopius, and many others after him, have considered it as the congener of the internal oblique; but its use seems to be to assist the lower part of the rectus.

Pyramida'lis facie'i. See *Levator labii superioris alæque nasi.*

Pyrenoi'des. (From ϖυρην, a kernel, and ειδος, likeness; so called from its kernel-like shape.) Applied to the odontoid process of the second vertebra.

Pyrete'rium. (From ϖυρ, fire, and τηρεω, to keep.) The fire-hole of a furnace.

PYRE'THRUM. (From ϖυρ, fire, because of the hot taste of its root.) See *Anthemis pyrethrum.*

Pyre'thrum sylve'stre. See *Achillea ptarmica*

RE'TOLOGY. (*Pyretologia*; from πυρετος, fever, and λογος, a discourse.) A discourse, or doctrine on fevers.

PYRE'XIA. (From ϖυρ, fire.) Fever.

PYRE'XIÆ. Febrile diseases. The first class of Cullen's nosology; characterised by frequency of pulse after a cold shivering, with increase of heat, and especially, among other impaired functions, a diminution of strength.

PYRIFO'RMIS. (From *pyrus*, a pear, and *forma*, a shape, shaped like a pear.) *Pyriformis*, seu *iliacus externus*, of Douglas and Cowper. Spigelius was the first who gave a name to this muscle, which he called *pyriformis*, from its supposed resemblance to a pear. It is the *pyriformis sive pyramidalis*, of Winslow, and *sacrotrochanterien*, of Dumas. A small radiated muscle, situated under the glutæus maximus, along the inferior edge of the glutæus minimus. It arises by three and sometimes four tendinous and fleshy origins, from the anterior surface of the second, third, and fourth pieces of the os sacrum, so that this part of it is within the pelvis. From these origins the muscle grows narrower, and passing out of the pelvis, below the niche in the posterior part of the ilium, from which it receives a few fleshy fibres, is inserted by a roundish tendon of an inch in length, into the upper part of the cavity at the root of the trochanter major. The use of this muscle is to assist in moving the thigh outwards, and in moving it a little upwards.

PYRI'TES. (From ϖυρ, fire; so called because it strikes fire with steel.) A metallic substance, formed of iron united with sulphur, from which almost all the sulphur of commerce is obtained.

Pyri'tes arsenica'lis. Sulphuret of iron with arsenic.

PYRMONT WATER. *Aqua pyrmontana.* A celebrated mineral spring at Pyrmont, a village in the circle of Westphalia, in Germany. It is of an agreeable though strongly acidulated taste, and emits a large portion of gas; which affects the persons who attend at the well, as well as those who drink the fluid, with a sensation somewhat resembling that produced by intoxication. A general view of the analysis of this water will show that it stands the first in rank of the highly carbonated chalybeates, and contains such an abundance of carbonic acid, as not only to hold dissolved a number of carbonic salts, but to show all the properties of this acid uncombined, and in its most active form. Pyrmont water is likewise a strong chalybeate, with regard to the proportion of iron; and it is besides a very hard water, containing much selenite and earthy carbonates. The diseases to which this mineral water may be advantageously applied, are the same as those for which the Spa, and others of the acidulated chalybeates, are resorted to, that is, in all cases of debility that require an active tonic that is not permanently heating; as various disorders in the alimentary canal, especially bilious vomiting, and diarrhœa, and complaints that originate from obstructed menstruation. At Pyrmont, the company generally drink this water by glassfuls, in a morning, to the quantity of two, three, or more English pints. Its common operation is by urine; but, if taken copiously, it generally proves laxative; and when it has not this effect, and that effect is wanted, they commonly mix, with the first glass drank in the morning, from one to five or six drachms of some purging salts.

PY′ROLA. (From *pyrus,* a pear; so named because its leaves resemble those of the pear-tree.) 1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

2. The pharmacopœial name of the round-leaved wintergreen.

Py′rola rotundifo′lia. The systematic name of the wintergreen. This elegant little plant, common in our woods, is now forgotten in the practice of medicine. It possesses gently adstringent qualities, and has a somewhat bitter taste.

PYRO-LIGNEOUS ACID. *Acidum pyro-lignosum.* An acid liquor of a brown colour, of a pretty strong and peculiar smell, obtained by distillation from wood, especially the beech, birch, and box. It is thought to be the acetic acid, somewhat disguised by empyreumatic oil.

PYROMETER. (From ϖυρ, fire, and μετρον, measure.) An instrument to measure those higher degrees of heat, to which the thermometer cannot be applied. See *Caloric.*

PYRO-MUCOUS ACID. *Acidum pyro-mucosum.* Syrupous acid. The acid liquor obtained by distillation from saccharine, gummy, or farinaceous mucilages. The celebrated Gren is of opinion, that it is a mixture of acetic with oxalic acid, and does not deserve to be received in the system of chemistry as a peculiar acid.

PYRO-TARTAROUS ACID. *Acidum pyro-tartrosum.* See *Tartar, spirit of.*

PYRO′SIS. (From ϖυροω, to burn.) *Pyrosis Suecica,* of Sauvages. *Cardialgia sputatoria,* of Linnæus. A disease called in Scotland the water-brash; in England, black-water. A genus of disease in the class *neuroses,* and order *spasmi,* of Cullen; known by a burning pain in the stomach, attended with copious eructation, generally of a watery insipid fluid.

Pyrote′chnia. (From ϖυρ, fire, and τεχνη, an art.) Chemistry, or that art by which the properties of bodies are examined by fire.

Pyro′tica. (From ϖυροω, to burn.) Caustics.

PY′RUS. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Pentagynia.*

Py′rus cydo′nia. The systematic name of the quince-tree. The fruit is termed *Cydonium malum,* or quince. The tree which affords this fruit is the *Pyrus cydonia; foliis integerrimis, floribus solitariis,* of Linnæus. Quince seeds are directed by the London College to be made into a decoction, which is recommended in aphthous affections, and excoriations of the mouth and fauces.

Py′rus ma′lus. The systematic name of the apple-tree. The common crab-tree, *Pyrus malus,* of Linnæus, is the parent of all the vast variety of apples at present cultivated. Apples, in general, when ripe, afford a pleasant and easily digestible fruit for the table; but, when the stomach is weak, they are very apt to remain unaltered for some days, and to produce dyspepsia. Sour fruits are to be considered as unwholesome, except when boiled or baked, and rendered soft and mellow with the addition of sugar.

Pyu′lcum. (From ϖυον, pus, and ελκω, to draw.) An instrument to extract the pus from the cavity of any sinuous ulcer.

Pyu′ria. See *Pyoturia.*

Pyxaca′ntha. (From ϖυξος, box, and ακανθα, a thorn.) The barberry, or thorny box-tree.

PY′XIS. Πυξις. Properly a box; but, from its resemblance, the cavity of the hip-bone, or acetabulum, has been sometimes so called.

Q.

Q. P. An abbreviation of *quantum placet,* as much as you please.

Q. S. The contraction for *quantum sufficit,* a sufficient quantity.

Q. V. An abbreviation of *quantum vis,* as much as you will.

Quadra′tus. See *Depressor labii inferioris.*

QUADRA′TUS FE′MORIS. (*Quadratus;* from *quadra,* a square; so called from its supposed shape.) *Tuber-ischio-trochanterien,* of Dumas. A muscle of the thigh, situated on the outside of the pelvis. It is a flat, thin, and fleshy muscle, but not of the shape its name would seem to indicate. It is situated immediately below the gemini. It arises tendinous and fleshy from the external surface and lower edge of the tuberosity of the ischium, and is inserted by short tendinous fibres into a ridge which is seen extending from the basis of the trochanter major to that of the trochanter minor. Its use is to bring the os femoris outwards.

Quadra'tus ge'næ. See *Platysma myoides.*

Quadra'tus la'bii inferio'ris. See *Depressor labii inferioris.*

QUADRA'TUS LUMBO'RUM. *Quadratus, seu Lumbaris externus,* of Winslow. *Ilio-lumbi-costal,* of Dumas. A muscle situated within the cavity of the abdomen. This is a small, flat, and oblong muscle, that has gotten the name of *quadratus,* from its shape, which is that of an irregular square. It is situated laterally, at the lower part of the spine. It arises tendinous and fleshy from about two inches from the posterior part of the spine of the ilium. From this broad origin it ascends obliquely inwards, and is inserted into the transverse processes of the four superior lumbar vertebræ, into the lower edge of the last rib, and, by a small tendon, that passes up under the diaphragm into the side of the last vertebra of the back. When this muscle acts singly, it draws the loins to one side; when both muscles act, they serve to support the spine, and perhaps to bend it forwards. In laborious respiration, the quadratus lumborum may assist in pulling down the ribs.

Quadra'tus maxi'llæ inferio'ris. See *Platysma myoides.*

Quadra'tus ra'dii. See *Pronator radii quadratus.*

Quadri'ga. (From *quatuor,* four, and *jugum,* a yoke.) A bandage which resembles the trappings of a four-horse-cart.

QUARTA'NA. *Febris quartana.* A fourth-day ague. Of this species of ague, as well as the other kinds, there are several varieties noticed by authors. The most frequent of these are, 1. The double quartan, with two paroxysms, or fits, on the first day, none on the second and third, and two again on the fourth day. 2. The double quartan, with a paroxysm, on the first day, another or the second, but none on the third. 3. The triple quartan, with three paroxysms every fourth day. 4. The triple quartan, with a slight paroxysm every day, every fourth paroxysm being similar. See also *Febris intermittens.*

QUARTZ. This name is given to the opaque, or irregularly figured vitrifiable stone.

QUA'SSIA. (From a slave of the name of *Quassi,* who first used it with uncommon success as a secret remedy in the malignant endemic fevers which frequently prevailed at Surinam.)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

2. The pharmacopœial name of the bitter quassia.

Quassia ama'ra. The systematic name of the bitter quassia tree. The root, bark, and wood of this tree, *Quassia, floribus hermaphroditis, foliis impari-pinnatis, foliolis oppositis, sessilibus, petiolo articulato alato, floribus racemosis,* of Linnæus, are all comprehended in the catalogues of the Materia Medica. The tree is a native of South America, particularly of Surinam, and also of some of the West-India islands.

The roots are perfectly ligneous; they may be medically considered in the same light as the wood, which is now most generally employed, and seems to differ from the bark in being less intensely bitter; the latter is therefore thought to be a more powerful medicine. Quassia has no sensible odour; its taste is that of a pure bitter, more intense and durable than that of almost any other known substance; it imparts its virtues more completely to watery than to spirituous menstrua, and its infusions are not blackened by the addition of sulphate of iron. The watery extract is from a sixth to a ninth of the weight of the wood, the spirituous about a twenty-fourth. Quassia, as before observed, derived its name from a negro named Quassi, who employed it with uncommon success as a secret remedy in the malignant endemic fevers, which frequently prevailed at Surinam. In consequence of a valuable consideration, this secret was disclosed to Daniel Rolander, a Swede, who brought specimens of the quassia wood to Stockholm, in the year 1756; and, since then, the effects of this drug have been generally tried in Europe, and numerous testimonies of its efficacy published by many respectable authors. Various experiments with quassia have likewise been made, with a view to ascertain its antiseptic powers; from which it appears to have considerable influence in retarding the tendency to putrefaction; and this, Professor Murray thinks, cannot be attributed to its sensible qualities, as it possesses no adstringency whatever; nor can it depend upon its bitterness, as gentian is much bitterer, yet less antiseptic. The medicinal virtues ascribed to quassia are those of a tonic, stomachic, antiseptic, and febrifuge. It has been found very effectual in restoring digestion, expelling flatulencies, and removing habitual costiveness, produced from debility of the intestines, and common to a sedentary life. Dr. Lettsom, whose extensive practice gave him an opportunity of trying the effects of quassia in a great number of cases, says "In debility, succeeding febrile diseases, the Peruvian bark is most generally more tonic and salutary than any other vegetable hitherto known; but in hysterical atony, to which the female sex is so prone, the quassia affords more vigour and relief to the system than the other, especially when united with the vitriolum album, and still more with the aid of some absorbent." In dyspepsia, arising from hard drinking, and also in diarrhœas, the doctor exhibited the quassia with great success. But, with respect to the tonic and febrifuge qualities of quassia, he says, "I by no means subscribe to the Linnæan opinion, where the author declares, 'me quidem judice chinchinam longe superat.'" It is very well known, that there are certain peculiarities of the air, and idiosyncrasies of constitution, unfavourable to the exhibition of Peruvian bark, even in the most clear intermissions of fever; and writers have repeatedly noticed it. But this is comparatively rare. About midsummer, 1785, Dr. L. met with several instances of low remittent and nervous fevers, wherein the bark uniformly aggravated the symptoms, though given in intermissions the most favourable to its success, and wherein quassia, or snakeroot, was successfully substituted. In such cases, he mostly observed, that there was great congestion in the hepatic system, and the debility at the same time discouraged copious evacuations. And in many fevers, without evident remissions to warrant the use of the bark, whilst at the time, increasing debility began to threaten the life of the patient, the Doctor found that quassia, or snake-root, singly or combined, upheld the vital powers, and promoted a critical intermission of fever, by which an opportunity was afforded for the bark to effect a cure. It may be given in infusion, or in pills made from the watery extract; the former is generally preferred, in the proportion of three or four scruples of the wood to twelve ounces of water.

Qua'ssia simarou'ba. The systematic name of the simarouba quassia. *Simarouba. Simaraba. Euonymus. Quassia, floribus monoicis, foliis abrupte pinnatis, foliolis alternis subpetiolatis petiolo nudo, floribus paniculatis,* of Linnæus. The bark of this tree, which is met with in the shops, is obtained from the roots; and, according to Dr. Wright of Jamaica, it is rough, scaly, and warted; the inside, when fresh, is a full yellow, but when dried paler: it has but little smell; the taste is bitter, but not disagreeable. It is esteemed, in the West Indies, in dysenteries and other fluxes, as restoring tone to the intestines, allaying their spasmodic motions, promoting the secretions by urine and perspiration, and removing lowness of spirits attending those diseases. It is said also that it soon disposes the patient to sleep; takes off the gripes and tenesmus, and changes the stools to their natural colour and consistence.

Quassy. See *Quassia.*

Qua'trio. (From *quatuor*, four; so called because it has four sides.) The astragalus.

Queen of the meadow. See *Spiræa ulmaria.*

Que'rcula. (*Quercula*, dim. of *quercus*, the oak; so called because it has leaves like the oak.) An antiquated name of the germander. See *Teucrium chamædrys.*

QUE'RCUS. (From *quero*, to enquire; because divinations were formerly given from oaks by the Druids.) The oak.

1. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Polyandria.* The oak.

2. The pharmacopœial name of the oak.

Que'rcus robu'r. The oak tree. *Quercus, foliis oblongis, glabris sinuatis, lobis rotundis, glandibus oblongis,* of Linnæus. *Balanos.* This valuable tree is indigenous to Britain. Its adstringent effects were sufficiently known to the antients, but it is the bark which is now directed for medicinal use by our pharmacopœias. Oak-bark manifests to the taste a strong adstringency, accompanied with a moderate bitterness. Like other adstringents, it has been recommended in agues, and for restraining hæmorrhages, alvine fluxes, and other immoderate evacuations. A decoction of it has likewise been advantageously employed as a gargle, and as a fomentation or lotion in *procidentia recti et uteri.*

The fruit of this tree was the food of the first ages; but when corn was cultivated, acorns were neglected. They are of little use with us, except for fattening hogs and other cattle and poultry. Among the Spaniards, the acorn, or *glans iberica*, is said to have long remained a delicacy, and to have been served up in the form of a dessert. In dearths, acorns have been sometimes dried, ground into meal, and baked as bread. Bartholin relates that they are used in Norway for this purpose. The inhabitants of Chio held out a long siege without any other food; and in a time of scarcity in France, A.D. 1709, they recurred to this food. But they are said to be hard of digestion, and to occasion headaches, flatulency, and colics. In Smoland, however, many instances occur, in which they have supplied a salutary and nutritious food. With this view they are previously boiled in water and separated from their husks, and then dried and ground; and the powder is mixed with about one half, or one-third of corn flour. A decoction of acorns is reputed good against dysenteries and colics; and a pessary of them is said to be useful in immoderate fluxes of the menses. Some have recommended the powder of acorns in intermittent fever; and in Brunswick, they mix it with warm ale, and administer it for producing a sweat in cases of erysipelas. Acorns roasted and bruised have restrained a violent diarrhœa. For other medical uses to which they have been applied, see Murray's Appar. Medic. vol. i. page 100.

From some late reports of the Academy of Sciences, at Petersburgh, we learn that acorns are the best substitute to coffee that has been hitherto known. To communicate to them the oily properties of coffee, the following process is recommended. When the acorns have been toasted brown, add fresh butter in small pieces to them, while hot in the ladle, and stir them with care, or cover the ladle and shake it, that the whole may be well mixed. The acorns of the Holm oak are formed at Venice into cups about one inch and an half in diameter, and somewhat less in depth. They are used for dressing leather, and instead of galls for dyeing woollen cloth black.

Que'rcus ce'rris. The sytematic name of the tree which affords the Turkey galls. *Nux galla. Galla maxima orbiculata.* The gall-nut. By this name is usually denoted any protuberance, tubercle, or tumour, produced by the puncture of insects on plants and trees of different kinds. These galls are of various forms and sizes, and no less different with regard to their internal structure. Some have only one cavity, and others a number of small cells, communicating with each other. Some of them are as hard as the wood of the tree they grow on, whilst others are soft and spongy; the first being termed gall-nuts, and the latter berry-galls, or apple-galls.

The gall used in medicine is thus produced:—the cynips quercus folii, an insect of the fly kind, deposits its eggs in the leaves and other tender parts of the tree. Around each puncture an excrescence is presently formed, within which the egg is hatched, and the worm passes through all the stages of its metamorphosis, until it becomes a perfect insect, when it eats its way out of its prison. The best oak-galls are heavy, knotted, and of a blueish colour, and are obtained from Aleppo. They are nearly entirely soluble in water, with the assistance of heat. This soluble active matter consists of tannin, in combination with gallic acid; nine-tenths of the former with one-tenth of the latter. Another sort comes from the south of Europe, of a light brownish or whitish colour, smooth, round, easily broken, less compact, and of a much larger size. The two sorts differ only in size and strength, two of the blue galls being supposed equivalent in this respect to three of the others.

Oak-galls are supposed to be the strongest adstringent in the vegetable kingdom. Both water and spirit take up nearly all their virtue, though the spiritous extract is the strongest preparation. The powder is, however, the best form; and the dose is from a few grains to half a drachm.

They are not much used in medicine, though they are said to be beneficial in intermittents. Dr. Cullen has cured agues, by giving half a drachm of the powder of galls every two or three hours during the intermission; and by it alone, or joined with camomile flowers, has prevented the return of the paroxysms. But the doctor states the amount of his results only to be this: that, "in many cases, the galls cured the intermittents; but that it failed also in many cases in which the Peruvian bark afterwards proved successful." A fomentation, made by macerating half an ounce of bruised galls in a quart of boiling water for an hour, has been found useful for the piles, the prolapsus ani, and the fluor albus, applied cold. An injection, simply adstringent, is made by diluting this fomentation, and used in gleets and leucorrhœa. The camphorated ointment of galls has been found also serviceable in piles, after the use of leeches; and is made by incorporating half a drachm of camphor with one ounce of hog's lard, and adding two drachms of galls in very fine powder. In fact, galls may be employed for the same purposes as oak-bark, and are used under the same forms.

Qu'ercus e'sculus. The systematic name of the Italian oak, whose acorns are, in times of scarcity, said to afford a meal of which bread is made.

Que'rcus mari'na. See *Fucus vesiculosus.*

Que'rcus phe'llos. The systematic name of the willow-leaved oak, whose acorns are much sweeter than chesnuts, and much eaten by the Indians. They afford, by expression, an oil little inferior to oil of almonds.

Que'rcus su'ber. The systematic name of the cork-tree. *Suber.* The fruit of this tree is much more nutritious than our acorns, and is sweet and often eaten when roasted in some parts of Spain. The bark, called cork, when burnt, is applied as an astringent application to bleeding piles; and to allay the pain usually attendant on hæmorrhoids, when mixed with an ointment. Pessaries and other chirurgical instruments are also made of this useful bark.

QUESNAY, Francis, was born near Paris in 1694. Though of humble parentage, and almost without education, he displayed an extraordinary zeal for knowledge, and after studying medicine in the French metropolis, he settled at Mantes. Having ably controverted the doctrines of Silva respecting blood-letting, he was appointed secretary to the Academy of Surgery; but the duties of this office having impaired his health, he graduated in physic, and was made consulting physician to the king. He was subsequently honoured with letters of nobility, and other marks of royal favour; and became a member of several learned societies. He died in 1774. He left several works, which display much research and observation, but with too great partiality to hypothesis. Besides the essays in favour of bleeding in many diseases, his preface to the Memoirs of the Academy of Surgery, gained him considerable applause: as likewise his Researches into the Progress of Surgery in France, though the accuracy of some of his statements was controverted.

Quick-grass. See *Triticum repens.*

Quick-lime. See *Lime.*

Quicksilver. See *Mercury.*

Quid pro quo. These words are applied the same as *succedaneum*, when one thing is made use of to supply the defect of another.

Quina quina. The Peruvian bark.

Quince. See *Pyrus cydonia.*

Quince, Bengal. See *Erateva marmelos.*

Quincy. See *Cynanche.*

Quinquefo′lium. (From *quinque*, five, and *folium*, a leaf; so called because it has five leaves on each foot-stalk.) *Pentaphyllum.* Cinquefoil or five-leaved grass. See *Potentilla reptans.*

Quinquina. See *Cinchona.*

Quinsey. See *Cynanche.*

QUOTIDIAN. See *Febris intermittens.*

R.

R. or ℞. This letter is placed at the beginning of a prescription as a contraction of *recipe*, take: thus, ℞ *Magnes.* ʒj, signifies, Take a drachm of magnesia.

Ra′bies cani′na. (*Rabies;* from *rabio*, to be mad, and *canina*, from *canis*, a dog.) See *Hydrophobia.*

RACHIA′LGIA. (From ραχις, the spine, and αλγος, pain.) A pain in the spine. It was formerly applied to several species of colic which induced pain in the back.

RACHI′TIS. (From ραχις, the spine of the back; so called because it was supposed to originate in a fault of the spinal marrow.) *Cyrtonosus.* The English disease. The rickets. A species of disease in the class *cachexiæ*, and order *intumescentiæ*, of Cullen; known by a large head, prominent forehead, protruded sternum, flattened ribs, big belly, and emaciated limbs, with great debility. It is usually confined in its attack between the two periods of nine months and two years of age, seldom appearing sooner than the former, or showing itself for the first time, after the latter period. The muscles become flaccid, the head enlarges, the carotids are distended, the limbs waste away, and their epiphyses increase in bulk. The bones and spine of the back are variously distorted; disinclination to muscular exertion follows; the abdomen swells and grows hard; the stools are frequent and loose; a slow fever succeeds, with cough and difficulty of respiration: atrophy is confirmed, and death ensues. Frequently it happens that nature restores the general health, and leaves the limbs distorted.

After death the liver and the spleen have been found enlarged and scirrhous; the mesenteric glands indurated, and the lungs either charged with vomicæ, or adhering to the pleura; the bones soft, the brain flaccid, or oppressed with lymph, and the distended bowels loaded most frequently with slime, sometimes with worms.

It is remarkable, that in the kindred disease, which Hoffman and Sauvages call the atrophy of infants, we have many of the same symptoms and the same appearances nearly after death. They who perish by this disease, says Hoffman, have the mesenteric glands enlarged and scirrhous; the liver and spleen obstructed, and increased in size; the intestines are much inflated, and are loaded with black and fœtid matters, and the muscles, more especially of the abdomen, waste away.

In the treatment of rickets, besides altering any improprieties in the regimen, which may have co-operated in producing it, those means should be employed, by which the system may be invigorated. Tonic medicines are therefore proper, particularly chalybeates, which are easily given to children; and the cold-bath may be essentially beneficial. The child should be regularly well exercised, kept clean and dry, and a pure air selected; the food nutritious and easy of digestion. When the appetite is much impaired, an occasional gentle emetic may do good; more frequently tonic aperients, as rhubarb, will be required to regulate the bowels; or sometimes a dose of calomel in gross habits. Of late certain compounds of lime have been strongly recommended, particularly the phosphate, which is the earthy basis of the bones; though it does not appear likely to enter the system, unless rendered soluble by an excess of acid. Others have conceived the disease to arise from an excess of acid, and therefore recommended alkalies; which may certainly be useful in correcting the morbid prevalence of acid in the primæ viæ, so frequent in children. Where the bones are inclined to bend, care must be taken not to throw the weight of the body too much upon them.

Racka′sira balsamum. See *Balsamum rackasira.*

Raco′sis. (From ρακος, a rag.) A ragged excoriation of the relaxed scrotum.

RADCLIFFE, John, was born at Wakefield, Yorkshire, in 1650. He went to Oxford at the age of 15, and having determined upon the medical profession, he passed rapidly through the preliminary studies, though with very little profoundness of research; and having taken the degree of bachelor of medicine in 1675, he immediately began to practise there. He professed to pay very little regard to the rules generally followed, which naturally drew upon him the enmity of the old practitioners; yet his vivacity and talents procured him a great number of patients, even of the highest rank. In 1684 he removed to London, having taken his doctor's degree two years before, and his success was unusually rapid; in the second year he was appointed physician to the princess Anne of Denmark; and after the Revolution he was consulted by king William. By his rough independence of spirit and freedom of language, however, he ultimately lost all favour at court; though he is said to have been still privately consulted in cases of emergency. In 1703 he had an attack of pleurisy, which had nearly proved fatal from his own imprudence. He continued, after his recovery, in very extensive practice, notwithstanding the caprice which he continually displayed: but his declining to attend queen Anne in her last illness, though it does not appear that he was sent for officially, excited the popular resentment strongly against him; and his apprehensions of the consequences are supposed to have accelerated his own death, which happened about three months after, in 1714. He was buried in St. Mary's church at Oxford. He founded a noble library and infirmary at that university; and also endowed two travelling medical fellowships, with an annual income of 300*l.* attached to each. It does not appear that he ever attempted to write; and, indeed, he is believed to have been very little conversant with books; yet the universal reputation which he acquired and maintained, notwithstanding his capricious conduct, seem to sanction the testimony of Dr. Mead, that "he was deservedly at the head of his profession, on account of his great medical penetration and experience."

Radial artery. *Arteria radialis.* A branch of the humeral artery, that runs down the side of the radius.

Radia′lis exte′rnus bre′vior. See *Extensor carpi radialis brevior.*

Radia′lis exte′rnus lo′ngior. See *Extensor carpi radialis longior.*

Radia′lis exte′rnus pri′mus. See *Extensor carpi radialis longior.*

Radia′lis inte′rnus. See *Flexor carpi radialis.*

Radia′lis secu′ndus. See *Extensor carpi radialis brevior.*

RADICAL. That which is considered as constituting the distinguishing part of an acid, by its union with the acidifying principle or oxygen, which is common to all acids. Thus sulphur is the radical of the sulphuric and sulphurous acids. It is sometimes called the base of the acid; but base is a term of more extensive application.

Radical vinegar. See *Acetum.*

RADI′CULA. (Dim. of *radix*, a root.) A little root; the fibrous part of a root. The common radish is so sometimes called. See *Raphanus sativus.*

Radish, horse. See *Cochlearia armoracia.*

Radish, garden. See *Raphanus sativus.*

RA′DIUS. (A spoke, a staff, or beam; so called from its resemblance.) This bone has gotten its name from its supposed resemblance to the spoke of a wheel, or to a weaver's beam; and sometimes from its supporting the hand, it has been called *manubrium manus.* Like the ulna, it is of a triangular figure, but it differs from that bone, in growing larger as it descends, so that its smaller part answers to the larger part of the ulna, and *vice versâ.* Of its two extremities, the uppermost and smallest is formed into a small rounded head, furnished with cartilage, and hollowed at its summit, for an articulation with the little head at the side of the pulley of the os humeri. The round border of this head, next the ulna, is formed for an articulation with the lesser sigmoid cavity of that bone. This little head of the radius is supported by a neck, at the bottom of which, laterally, is a considerable tuberosity, into the posterior half of which is inserted the posterior tendon of the biceps, while the anterior half is covered with cartilage, and surrounded with a capsular ligament, so as to allow this tendon to slide upon it as upon a pulley. Immediately below this tuberosity, the body of the bone may be said to begin. We find it slightly curved throughout its whole length, by which means a greater space is formed for the lodgment of muscles, and it is enabled to cross the ulna without compressing them. Of the three surfaces to be distinguished on the body of the bone, the external and internal ones are the broadest and flattest. The anterior surface is narrower and more convex. Of its angles, the external and internal ones are rounded; but the posterior angle, which is turned towards the ulna, is formed into a sharp spine, which serves for the attachment of the interosseous ligament, of which mention is made in the description of the ulna. This strong ligament, which is a little interrupted above and below, serves not only to connect the bones of the fore-arm to each other, but likewise to afford a greater surface for the lodgment of muscles. On the fore-part of the bone, and at about one-third of its length, from its upper end, we observe a channel for vessels, slanting obliquely upwards. Towards its lower extremity, the radius becomes broader, of an irregular shape, and somewhat flattened, affording three surfaces, of which the posterior one is the smallest; the second, which is a continuation of the internal surface of the body of the bone, is broader and flatter than the first; and the third, which is the broadest of the three, answers to the anterior and external surface of the body of the bone. On this last, we observe several sinuosities, covered with a thin layer of cartilage, upon which slide the tendons of several muscles of the wrist and fingers. The lowest part of the bone is formed into an oblong articulating cavity, divided into two by a slight transverse rising. This cavity is formed for an articulation with the bones of the wrist. Towards the anterior and convex surface of the bone, this cavity is defended by a remarkable eminence, called the *styloid* process of the radius, which is covered with a cartilage that is extended to the lower extremity of the ulna; a ligament is likewise stretched from it to the wrist. Besides this large cavity, the radius has another much smaller one, opposite its styloid process, which is lined with cartilage, and receives the rounded surface of the ulna. The articulation of the radius with the lesser sigmoid cavity of the ulna, is strengthened by a circular ligament which is attached to the two extremities of that cavity, and from thence surrounds the head of the radius. This ligament is narrowest, but thickest at its middle part. But, besides this ligament, which connects the two bones of the fore-arm with each other, the ligaments which secure the articulation of the radius with the os humeri, are common both to it and to the ulna, and therefore cannot well be understood till both these bones are described. These ligaments are a capsular and two lateral ligaments. The capsular ligament is attached to the anterior and posterior surfaces of the lower extremity of the os humeri, to the upper edges and sides of the cavities, we remarked, at the bottom of the pulley and little head, and likewise to some part of the condyles: from thence it is spread over the ulna, to the edges of the greater sigmoid cavity so as to include in it the end of the olecranon and of the coronoid process; and it is likewise fixed round the neck of the radius, so as to include the head of that bone within it. The lateral ligaments may be distinguished into external and internal, or, according to Winslow, into *brachio-radialis*, and *brachio-cubitalis*. They both descend laterally from the lowest part of each condyle of the os humeri, and, from their fibres spreading wide as they descend, have been compared to a goose's foot. The internal ligament or brachio-cubitalis, which is the longest and thickest of the two, is attached to the coronoid process of the ulna. The external ligament, or brachio-radialis, terminates in the circular ligament of the radius. Both these ligaments adhere firmly to the capsular ligament, and to the tendons of some of the adjacent muscles. In considering the articulation of the fore-arm with the os humeri, we find that when both the bones are moved together upon the os humeri, the motion of the ulna upon the pulley allows only of flexion and extension; whereas, when the palm of the hand is turned downwards or upwards, or in other words, in pronation and supination, we see the radius moving upon its axis, and in these motions its head turns upon the little head of the os humeri at the side of the pulley, while its circular edge rolls in the lesser sigmoid cavity of the ulna. At the lower end of the fore-arm the edge of the ulna is received into a superficial cavity at the side of the radius. This articulation, which is surrounded by a loose capsular ligament, concurs with the articulation above, in enabling the radius to turn with great facility upon its axis; and it is chiefly with the assistance of this bone that we are enabled to turn the palm of the hand upwards or downwards, the ulna having but a very inconsiderable share in these motions.

RA'DIX. (*Radix, -dicis, f.*) A root.

Ra'dix a'cori. Galanga, or galangal.

Ra'dix benga'le. See *Cassumuniar*.

Ra'dix brasilie'nsis. See *Callicocca ipecacuanha*.

Ra'dix calagua'læ. See *Calagualæ radix*.

Ra'dix calague'llæ. See *Calagualæ radix*.

Ra'dix cassumu'niar. See *Cassumuniar*.

Ra'dix chy'nlen. See *Chynlen radix*.

Ra'dix colo'mbo. See *Calumba*.

Ra'dix du'lcis. See *Glycyrrhiza*.

Ra'dix i'kan. See *Ikan radix*.

Ra'dix india'na. See *Callicocca ipecacuanha*.

Ra'dix i'ndica lopezia'na. See *Lopez radix*.

Ra'dix matali'sta. See *Matalista radix*.

Ra'dix ro'sea. See *Rhodiola*.

Ra'dix ru'bra. See *Rubia*.

Ra'dix ti'mac. See *Timac*.

Ra'dix ursi'na. See *Æthusa meum*.

RA'DULA. (From *rado*, to scrape off.) A wooden spatula, or scraper.

Ragwort. See *Senecio Jacobæa.*

Raisin. See *Vitis vinifera.*

Rama'lis ve'na. (From *ramale*, a dead bough.) Applied to the vena portæ, from its numerous ramifications, which resemble a bough stripped of its leaves.

RAMAZZINI, Bernardin, was born at Carpi in Italy in 1633. He graduated at Parma at the age of 26, and after studying some time longer at Rome, settled in the Duchy of Castro: but ill health obliged him speedily to return to his native place. His reputation increasing he removed to Modena in 1671, where he met with considerable success; and in 1682 he was appointed professor of the theory of medicine in the university recently established there, which office he filled for eighteen years with great credit. He was then invited to a similar appointment at Padua, and exerted himself with laudable ardour for three years; when he was attacked with a disease of the eyes, which ultimately deprived him of sight. In 1708 the Senate of Venice appointed him President of the College of Physicians of that capital, and in the following year raised him to the first professorship of the practice of medicine. He continued to perform the duties of these offices with great diligence and reputation till his death in 1714. He was a member of many of the academies of science established in Germany, &c.; and left several works in the latin Language, remarkable for the elegance of their style, and other merits. The principal of these, and which will be ever held in estimation, is entitled "De Morbis Artificum Diatriba," giving an account of the diseases peculiar to different artists and manufacturers.

Ra'mex. (From *ramus*, a branch; from its protruding forwards, like a bud.) A rupture.

RA'NA ESCULE'NTA. The French frog. The flesh of this species of frog, very common in France, is highly nutritious and easily digested.

Rancid. Oily substances are said to have become rancid when, by keeping, they acquire a strong offensive smell, and altered taste.

RANINE ARTERY. *Arteria ranina.* Sublingual artery. The second branch of the external carotid.

RA'NULA. (From *rana*, a frog; so called from its resemblance to a frog, or because it makes the patient croak like a frog.) *Batrachos. Hypoglossus. Hypoglossum. Rana.* An inflammatory, or indolent tumour, under the tongue. These tumours are of various sizes and degrees of consistence, seated on either side of the frænum. Children, as well as adults, are sometimes affected with tumours of this kind; in the former, they impede the action of sucking; in the latter, of mastication, and even speech. The contents of them are various; in some, they resemble the saliva, in others, the glairy matter found in the cells of swelled joints. Sometimes, it is said that a fatty matter has been found in them; but from the nature and structure of the parts, we are sure that this can seldom happen; and, in by far the greatest number of cases, we find that the contents resemble the saliva itself. This, indeed, might naturally be expected, for the cause of these tumours is universally to be looked for in an obstruction of the salivary ducts. Obstructions here may arise from a cold, inflammation, violent fits of the tooth-ache, attended with swelling in the inside of the mouth; and, in not a few cases, we find the ducts obstructed by a stony matter, seemingly separated from the saliva, as the calculous matter is from the urine; but where inflammation has been the cause, we always find matter mixed with the other contents of the tumour. As these tumours are not usually attended with much pain, they are sometimes neglected, till they burst of themselves, which they commonly do when arrived at the bulk of a large nut. As they were produced originally from an obstruction in the salivary duct, and this obstruction cannot be removed by the bursting of the tumour, it thence happens that they leave an ulcer extremely difficult to heal, nay, which cannot be healed at all till the cause is removed.

Ranunculoi'des. (From *ranunculus*, and ειδος, resemblance; so named from its resemblance to the ranunculus.) The Caltha palustris or marsh marigold.

RANU'NCULUS. (Dim. of *rana*, a frog; because it is found in fenny places, where frogs abound.) The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Polygynia.*

The great acrimony of most of the species of ranunculus is such, that, on being applied to the skin, they excite itching, redness, and inflammation, and even produce blisters, tumefaction and ulceration of the part. On being chewed, they corrode the tongue; and, if taken into the stomach, bring on all the deleterious effects of an acrid poison. The corrosive acrimony which this family of plants possesses, was not unknown to the antients, as appears from the writings of Dioscorides; but its nature and extent had never been investigated by experiments, before those instituted by C. Krapf, at Vienna, by which we learn, that the most virulent of the Linnæan species of ranunculus, are the bulbosus, sceleratus, acris, arvensis, thora, and illyricus.

The effects of these were tried, either upon himself or upon dogs, and show that the acrimony of the different species is often confined to certain parts of the plant, manifesting itself either in the roots, stalks, leaves, flowers, or buds; the expressed juice, extract, decoction, and infusion of the plants, were also subjected to experiments. In addition to these species mentioned by Krapf, we may also notice the R. Flammula, and especially the R. Alpestris, which according to Haller, is the most acrid of this genus. Mr. Curtis observes, that even pulling up the ranunculus acris, the common meadow species, which possesses the active principle of this tribe, in a very considerable degree, throughout the whole herb, and carrying it to some little distance, excited a considerable inflammation in the palm of the hand in which it was held. It is necessary to remark, that the acrimonious quality of these plants is not of a fixed nature; for it may be completely dissipated by heat; and the plant, on being thoroughly dried, becomes perfectly bland. Krapf attempted to counteract this venomous acrimony of the ranunculus by means of various other vegetables, none of which was found to answer the purpose, though he thought that the juice of sorrel, and that of unripe currants, had some effect in this way; yet these were much less availing than water; while vinegar, honey, sugar, wine, spirit, mineral acids, oil of tartar, p. d. and other sapid substances, manifestly rendered the acrimony more corrosive. It may be also noticed, that the virulency of most of the plants of this genus, depends much upon the situation in which they grow, and is greatly diminished in the cultivated plant.

Ranu′nculus aborti′vus. The systematic name of a species of ranunculus, which possesses acrid and vesicating properties.

Ranu′nculus a′cris. The systematic name of the meadow crow-foot. *Ranunculus pratensis.* This, and some other species of ranunculus, have, for medical purposes, been chiefly employed externally as a vesicatory, and are said to have the advantage of a common blistering plaster, in producing a quicker effect, and never causing a strangury; but, on the other hand, it has been observed, that the ranunculus is less certain in its operation, and that it sometimes occasions ulcers, which prove very troublesome and difficult to heal. Therefore their use seems to be applicable only to certain fixed pains, and such complaints as require a long continued topical stimulus or discharge from the part, in the way of an issue, which, in various cases, has been found to be a powerful remedy.

Ranu′nculus a′lbus. The plant which bears this name in the pharmacopœias is the *Anemone nemorosa*, of Linnæus: which see.

Ranu′nculus bulbo′sus. Bulbous rooted crow-foot. The roots and leaves of this plant, *Ranunculus:—calycibus retroflexis, pedunculis sulcatis, caule erecto multifloro, foliis compositis*, of Linnæus, have no considerable smell, but a highly acrid and fiery taste. Taken internally, they appear to be deleterious, even when so far freed from the caustic matter by boiling in water, as to discover no ill quality to the palate. The effluvia, likewise, when freely inspired, are said to occasion head-aches, anxieties, vomitings, &c. The leaves and roots, applied externally, inflame and ulcerate, or vesicate the parts, and are liable to affect also the adjacent parts to a considerable extent.

Ranu′nculus fica′ria. The systematic name of the pilewort. *Chelidonium minus. Scrophularia minor. Chelidonia rotundifolia minor. Cursuma hæmorrhoidalis herba. Ranunculus vernus.* Lesser celandine, and pilewort. The leaves and root of this plant, *Ranunculus; foliis cordatis angulatis petiolatis, caule unifloro*, of Linnæus, are used medicinally. The leaves are deemed antiscorbutic, and the root reckoned a specific, if beat into cataplasms, and applied to the piles.

Ranu′nculus fla′mmula. The systematic name of the smaller water crow-foot, or spearwort. *Surrecta alba.* The roots and leaves of this common plant, *Ranunculus:—foliis ovatis-lanceolatis, petiolatis, caule declinato*, of Linnæus, taste very acrid and hot, and, when taken in a small quantity, produce vomiting, spasms of the stomach, and delirium. Applied externally, they vesicate the skin. The best antidote, after clearing the stomach, is cold water acidulated with lemon-juice, and then mucilaginous drinks.

Ranu′nculus palu′stris. Water crow-foot. See *Ranunculus sceleratus.*

Ranu′nculus prate′nsis. Meadow crow-foot. See *Ranunculus acris.*

Ranu′nculus scelera′tus. The systematic name of the marsh crow-foot. *Ranunculus palustris.* The leaves of this species of crow-foot are so extremely acrid, that the beggars in Switzerland are said, by rubbing their legs with them, to produce a very fetid and acrimonious ulceration.

Ra′pa. The turnip. See *Brassica.*

Rape. See *Brassica.*

RAPHA′NIA. (From *raphanus*, the radish, or charlock; because the disease is said to be produced by eating the seeds of a species of raphanus.) *Convulsio raphania, vel ab ustilagine. Eclampsia typhodes. Convulsio soloniensis. Necrosis ustilaginea.* Cripple disease. A genus of disease in the class *neuroses*, and order *spasmi*, of Cullen; characterised by a spasmodic contraction of the joints, with convulsive motions, and a most violent pain returning at various periods. It begins with cold chills and lassitude, pain in the head, and anxiety about the præcordia. These symptoms are followed by spasmodic twitchings in the tendons of the fingers and of the feet, discernible to the eye, heat, fever, stupor, delirium, sense of suffocation, aphonia, and horrid convulsions of the limbs. After these, vomiting and diarrhœa come on, with a discharge of worms, if there are any. About the eleventh or the twentieth day, copious sweats succeed, or purple exanthemata, or tabes, or rigidity of all the joints.

RA′PHANUS. (Ραφανος ϖαρα το ραδιως

φαινεσθαι: from its quick growth.) The radish. A genus of plants in the Linnæan system. Class, *Tetradynamia*. Order, *Siliculosa*.

RA'PHANUS HORTE'NSIS. See *Raphanus sativus*.

RA'PHANUS NI'GER. See *Raphanus sativus*.

RA'PHANUS RUSTICA'NUS. See *Cochlearia armoracia*.

RA'PHANUS SATI'VUS. The systematic name of the radish plant. *Raphanus hortensis. Radicula. Raphanus niger.* The radish. The several varieties of this plant, are said to be employed medicinally in the cure of calculous affections. The juice, made into a syrup, is given to relieve hoarseness. Mixed with honey or sugar, it is administered in pituitous asthma; and, as antiscorbutics, their efficacy is generally acknowledged.

RA'PHANUS SYLVE'STRIS. The poor man's pepper is sometimes so called. See *Lepidium*.

RA'PHE SCRO'TI. (Ραφη, a suture.) The rough eminence which divides the scrotum, as it were, in two. It proceeds from the root of the penis inferiorly towards the perinæum.

RA'PHE CE'REBRI. The longitudinal eminence of the corpus callosum of the brain is so called, because it appears somewhat like a suture.

RAPI'STRUM. (From *rapa*, the turnip, because its leaves resemble those of turnip.) *Lampsana. Miagra.* Charlock, or wild mustard.

RA'PUM. (*Ety.* uncertain.) See *Brassica rapa*.

RAPU'NCULUS. (Dim. of *rapa*, the turnip.) The wild turnip.

RAPU'NCULUS VIRGINIA'NUS. The name given by Morrison to the blue cardinal flower. See *Lobelia*.

RA'PUS. See *Brassica rapa*.

RASH. *Exanthema*. A rash consists of red patches on the skin, variously figured; in general confluent, and diffused irregularly over the body, leaving interstices of a natural colour. Portions of the cuticle are often elevated in a rash, but the elevations are not acuminated. The eruption is usually accompanied with a general disorder of the constitution, and terminates in a few days by cuticular exfoliations.

RASPATO'RIUM. (From *rado*, to scrape.) A surgeon's rasp.

Raspberry. See *Rubus idæus*.

RASU'RA. (From *rado*, to scrape.) 1. A rasure or scratch. 2. The raspings or shavings of any substance.

RATIFIA. A liquor prepared by imparting to ardent spirits the flavour of various kinds of fruits.

Rattlesnake root. See *Polygala Senega*.

RAUCE'DO. (From *raucus*, hoarse.) *Raucitas*. Hoarseness. It is always symptomatic of some other disease.

REAGENTS. Tests. Those substances which are used in chemistry to detect the presence of other bodies. In the application of tests there are two circumstances to be attended to, viz. To avoid deceitful appearances, and to have good tests.

The principal tests are the following:

1. *Litmus*. The purple of litmus is changed to red by every acid; so that this is the test generally made use of to detect excess of acid in any fluid. It may be used either by dipping into the water a paper stained with litmus, or by adding a drop of the tincture to the water to be examined, and comparing its hue with that of an equal quantity of the tincture in distilled water.

Litmus already reddened by an acid will have its purple restored by an alkali; and thus it may also be used as a test for alkalis, but it is much less active than other direct alkaline tests.

2. *Red cabbage* has been found by Mr. Watt to furnish as delicate a test for acids as litmus, and to be still more sensible to alkalis. The natural colour of an infusion of this plant is blue, which is changed to red by acids, and to green by alkalis in very minute quantities.

3. *Brazil wood*. When chips of this wood are infused in warm water they yield a red liquor, which readily turns blue by alkalis, either caustic or carbonated. It is also rendered blue by the carbonated earths held in solution by carbonic acid, so that it is not an unequivocal test of alkalis till the earthy carbonates have been precipitated by boiling. Acids change to yellow the natural red of brazil wood, and restore the red when changed by alkalis.

4. *Violets*. The delicate blue of the common scented violet is readily changed to green by alkalis, and this affords a delicate test for these substances. Syrup of violets is generally used as it is at hand, being used in medicine. But a tincture of the flower will answer as well.

5. *Turmeric*. This is a very delicate test for alkalis, and on the whole, perhaps, is the best. The natural colour either in watery or spirituous infusion is yellow, which is changed to a brick or orange red by alkalis, caustic or carbonated, but not by carbonated earths, on which account it is preferable to Brazil wood.

The pure earths, such as lime and barytes produce the same change.

6. *Rhubarb*. Infusion or tincture of rhubarb undergoes a similar change with tumeric and is equally delicate.

7. *Sulphuric acid*. A drop or two of concentrated sulphuric acid, added to water that contains carbonic acid, free or in combination, causes the latter to escape with a pretty brisk effervescence, whereby

the presence of this gaseous acid may be detected.

8. *Nitric and oxymuriatic acid.* A peculiar use attends the employment of these acids in the sulphuretted waters, as the sulphuretted hydrogen is decomposed by them, its hydrogen absorbed, and the sulphur separated in its natural form.

9. *Oxalic acid and oxalate of ammonia.* These are the most delicate tests for lime and all soluble calcareous salts. Oxalate of lime, though nearly insoluble in water, dissolves in a moderate quantity in its own or any other acid, and hence in analysis oxalate of ammonia is often preferred, as no excess of this salt can re-dissolve the precipitated oxalate of lime. On the other hand the ammonia should not exceed, otherwise it might give a false indication.

10. *Gallic acid and tincture of galls.* These are tests of iron. Where the iron is in very minute quantities, and the water somewhat acidulous, these tests do not always produce a precipitate, but only a slight reddening, but their action is much heightened by previously adding a few drops of any alkaline solution.

11. *Prussiate of potash or lime.* The presence of iron in water is equally well indicated by these prussiates, causing a blue precipitate: and if the prussiate of potash is properly prepared, it will only be precipitated by a metallic salt, so that manganese and copper will also be detected, the former giving a white precipitate, the latter a red precipitate.

12. *Lime-water* is the common test for carbonic acid, it decomposes all the magnesian salts, and likewise the aluminous salts, it likewise produces a cloudiness with most of the sulphates owing to the formation of selenite.

13. *Ammonia.* This alkali when perfectly caustic serves as a distinction between the salts of lime and those of magnesia, as it precipitates the earth from the latter salts, but not from the former. There are two sources of error to be obviated, one is that of carbonic acid being present in the water, the other is the presence of aluminous salts.

14. *Carbonated alkalis.* These are used to precipitate all the earths; where carbonate of potash is used particular care should be taken of its purity, as it generally contains silex.

15. *Muriated alumine.* This test is proposed by Mr. Kirwan to detect carbonate of magnesia, which cannot, like carbonated lime, be separated by ebullition, but remains till the whole liquid is evaporated.

16. *Barytic salts.* The nitrate, muriate, and acetate of barytes are all equally good tests of sulphuric acid in any combination.

17. *Salts of silver.* The salts of silver are the most delicate tests of muriatic acid, in any combination, producing the precipitated luna cornea. All the salts of silver likewise give a dark-brown precipitate with the sulphuretted waters, which is as delicate a test as any that we possess.

18. *Salts of lead.* The nitrate and acetate of lead are the salts of this metal employed as tests. They will indicate the sulphuric, muriatic, and boracic acids, and sulphuretted hydrogen or sulphuret of potash.

19. *Soap.* A solution of soap in distilled water or in alkohol is curdled by water containing any earthy or metallic salt.

20. *Tartaric acid.* This acid is of use in distinguishing the salts of potash, (with which it forms a precipitate of cream of tartar,) from those of soda, from which it does not precipitate. The potash, however, must exist in some quantity to be detected by the test.

21. *Nitro-muriate of platina.* This sort is still more discriminative between potash and the other alkalis, than acid of tartar, and will produce a precipitate with a very weak solution of any salt with potash.

22. *Alkohol.* This most useful re-agent is applicable in a variety of ways in analysis. As it dissolves some substances found in fluids, and leaves others untouched, it is a means of separating them into two classes, which saves considerable trouble in the further investigation. Those salts which it does not dissolve, it precipitates from their watery solution, but more or less completely according to the salt contained, and the strength of the alkohol, and as a precipitant it also assists in many decompositions.

REA'LGAR. *Arlada. Arladar. Auripigmentum rubrum. Arsenicum rubrum factitium. Abessi.* A metallic substance of a red colour, more or less lively and transparent, and often crystallized in brilliant needles; formed by a combination of arsenic with sulphur. See *Arsenic.*

RECEPTA'CULUM CHY'LI. (*Receptaculum,* from *recipio,* to receive.) *Receptaculum Pecqueti,* because Pecquet first attempted to demonstrate it. *Diversorium. Sacculus chyliferus.* The existence of such a receptacle in the human body is doubted. In brute animals the receptacle of the chyle is situated on the dorsal vertebræ where the lacteals all meet. See *Absorbents.*

RECTIFICATION. (*Rectificatio,* from *rectifico,* to make clear.) A second distillation, in which substances are purified by their more volatile parts being raised by heat carefully managed; thus, spirit of wine, æther, &c. are rectified by their separation from the less volatile and foreign matter which altered or debased their properties.

Re′ctor spi′ritus. The aromatic part of plants.

RE′CTUM. (So named from an erroneous opinion that it was straight.) *Rectum intestinum. Apeuthysmenos. Longanon,* or *longaon. Archos. Cyssaros.* The last portion of the large intestines terminating in the anus. See *Intestines.*

RE′CTUS ABDO′MINIS. *Pubiosternal,* of Dumas. This long and straight muscle is situated near its fellow, at the middle and fore-part of the abdomen, parallel to the linea alba, and between the aponeuroses of the other abdominal muscles. It arises sometimes by a single broad tendon from the upper and inner part of the os pubis, but more commonly by two heads, one of which is fleshy, and originates from the upper edge of the pubis, and the other tendinous, from the inside of the symphysis pubis, behind the pyramidalis muscle. From these beginnings, the muscle runs upwards the whole length of the linea alba, and becoming broader and thinner as it ascends, is inserted by a thin aponeurosis into the edge of the cartilago ensiformis, and into the cartilages of the fifth, sixth, and seventh ribs. This aponeurosis is placed under the pectoral muscle, and sometimes adheres to the fourth rib. The fibres of this muscle are commonly divided by three tendinous intersections, which were first noticed by Berenger, or, as he is commonly called, Carpi, an Italian anatomist, who flourished in the sixteenth century. One of these intersections is usually where the muscle runs over the cartilage of the seventh rib; another is at the umbilicus; and the third is between these two. Sometimes there is one, and even two, between the umbilicus and the pubes. When one, or both of these occur, however, they seldom extend more than half way across the muscle. As these intersections seldom penetrate through the whole substance of the muscle, they are all of them most apparent on its anterior surface, where they firmly adhere to the sheath; the adhesions of the rectus to the posterior layer of the internal oblique, are only by means of cellular membrane, and of a few vessels which pass from one to another.

Albinus and some others have seen this muscle extending as far as the upper part of the sternum.

The use of the rectus is to compress the fore-part of the abdomen, but more particularly the lower part; and, according to the different positions of the body, it may likewise serve to bend the trunk forwards, or to raise the pelvis. Its situation between the two layers of the internal oblique, and its adhesions to this sheath, secure it in its place, and prevent it from rising into a prominent form when in action; and lastly, its tendinous intersections enable it to contract at any of the intermediate spaces.

Re′ctus abdu′cens o′culi. See *Rectus externus oculi.*

Re′ctus addu′cens o′culi. See *Rectus internus oculi.*

Re′ctus ante′rior bre′vis. See *Rectus capitis internus minor.*

Re′ctus ante′rior lo′ngus. See *Rectus capitis internus major.*

Re′ctus atto′llens o′culi. See *Rectus superior oculi.*

Re′ctus ca′pitis anti′cus lo′ngus. See *Rectus capitis internus major.*

RE′CTUS CA′PITIS INTE′RNUS MA′JOR. *Rectus internus major,* of Albinus, Douglas, and Cowper. *Trachelo-basilaire,* of Dumas. *Rectus anterior longus,* of Winslow. This muscle is situated on the anterior part of the neck, close to the vertebræ. It was known to most of the antient anatomists, but was not distinguished by any particular name until Cowper gave it the present appellation, and which has been adopted by most writers except Winslow. It is a long muscle, thicker and broader above than below, where it is thin, and terminates in a point. It arises, by distinct and flat tendons, from the anterior points of the transverse processes of the five inferior vertebræ of the neck, and ascending obliquely upwards, is inserted into the anterior part of the cuneiform process of the occipital bone. The use of this muscle is to bend the head forwards.

RE′CTUS CA′PITIS INTE′RNUS MI′NOR. Cowper, who was the first accurate describer of this little muscle, gave it the name of *rectus internus minor,* which has been adopted by Douglas and Albinus. Winslow calls it *rectus anterior brevis;* and Dumas *petit-trachelo-basilaire.* It is in part covered by the rectus major. It arises fleshy from the upper and fore-part of the body of the first vetebra of the neck, near the origin of its transverse process, and, ascending obliquely inwards, is inserted near the root of the condyloid process of the occipital bone, under the last-described muscle. It assists in bending the head forwards.

RE′CTUS CA′PITIS LATERA′LIS. *Rectus lateralis Fallopii,* of Douglas. *Transversalis anticus primus,* of Winslow. *Rectus lateralis,* of Cowper, and *Tracheli-altoido basilaire,* of Dumas. This muscle seems to have been first described by Fallopius. Winslow calls it *transversalis anticus primus.* It is somewhat larger than the rectus minor, but resembles it in shape, and is situated immediately behind the internal jugular vein, at its coming out of the cranium. It arises fleshy from the upper and fore part of the transverse process of the first vertebra of the neck, and, ascending a-little obliquely upwards and outwards, is inserted into the occipital bone, opposite to the stylo-mastoid hole of the os temporis. This muscle serves to pull the head to one side.

RE'CTUS CA'PITIS POSTI'CUS MA'JOR. This, which is the *rectus major* of Douglas and Winslow, the *rectus capitis posticus minor*, of Albinus, and the *spine-axoido-occipital*, of Dumas, is a small, short, and flat muscle, broader above than below, and is situated, not in a straight direction, as its name would insinuate, but obliquely, between the occiput and the second vertebra of the neck, immediately under the complexus. It arises, by a short thick tendon, from the upper and posterior part of the spinous process of the second vertebra of the neck; it soon becomes broader, and ascending obliquely outwards, is inserted, by a flat tendon, into the external lateral part of the lower semi-circular ridge of the os occipitis. The use of this is to extend the head, and pull it backwards.

REC'TUS CA'PITIS POSTI'CUS MI'NOR. This is the *rectus minor*, of Douglas and Winslow, and the *tuber-altoido-occipital*, of Dumas. It is smaller than the last-described muscle, but resembles it in shape, and is placed close by its fellow, in the space between the recti majores. It arises, by a short thick tendon, from the upper and lateral part of a little protuberance in the middle of the back part of the first vertebra of the neck, and, becoming broader and thinner as it ascends, is inserted, by a broad flat tendon, into the occipital bone, immediately under the insertion of the last-described muscle. The use of it is to assist the rectus major in drawing the head backwards.

Re'ctus cru'ris. See *Rectus femoris.*

Re'ctus de'primens o'culi. See *Rectus inferior oculi.*

RE'CTUS EXTE'RNUS O'CULI. *Abductor oculi. Indignabundus.* The outer straight muscle of the eye. It arises from the bony partition between the foramen opticum and lacerum, being the longest of the straight muscles of the eye, and is inserted into the sclerotic membrane, opposite to the outer canthus of the eye. Its use is to move the eye outwards.

RE'CTUS FE'MORIS. *Rectus* sive *Gracilis anterior,* of Winslow. *Rectus cruris,* of Albinus, and *Ilio-rotulien,* of Dumas. A straight muscle of the thigh, situated immediately at the fore part. It arises from the os ilium by two tendons. The foremost and shortest of these springs from the outer surface of the inferior and anterior spinous process of the ilium; the posterior tendon, which is thicker and longer than the other, arises from the posterior and outer part of the edge of the cotyloid cavity, and from the adjacent capsular ligament. These two tendons soon unite, and form an aponeurosis, which spreads over the anterior surface of the upper part of the muscle; and through its whole length we observe a middle tendon, towards which its fleshy fibres run on each side in an oblique direction, so that it may be styled a penniform muscle. It is inserted tendinous into the upper edge and anterior surface of the patella, and from thence sends off a thin aponeurosis, which adheres to the superior and lateral part of the tibia. Its use is to extend the leg.

RE'CTUS INFE'RIOR O'CULI. *Depressor oculi. Deprimens. Humilis.* The inferior of the straight muscles of the eye. It arises within the socket, from below the optic foramen, and passes forwards to be inserted into the sclerotic membrane of the bulb on the under part. It pulls the eye downwards.

Re'ctus inte'rnus fe'moris. See *Gracilis.*

RE'CTUS INTE'RNUS O'CULI. *Adducens oculi. Bibitorius.* The internal straight muscle of the eye. It arises from the inferior part of the foramen opticum, between the obliquus superior, and the rectus inferior, being, from its situation, the shortest muscle of the eye, and is inserted into the sclerotic membrane opposite to the inner angle. Its use is to turn the eye towards the nose.

Re'ctus latera'lis fallo'pii. See *Rectus capitis lateralis.*

Re'ctus ma'jor ca'pitis. See *Rectus capitis posticus major.*

RE'CTUS SUPE'RIOR O'CULI. *Attollens oculi. Levator oculi. Superbus.* The uppermost straight muscle of the eye. It arises from the upper part of the foramen opticum of the sphenoid bone below the levator palpebræ superioris, and runs forward to be inserted into the superior and fore part of the sclerotic membrane by a broad and thin tendon.

RECURRENT NERVES. Two branches of the par vagum in the cavity of the thorax. The right is given off near the subclavian artery, which it surrounds, and is reflected upwards to the thyroid gland; the left a little lower, and reflected around the aorta to the œsophagus, as far as the larynx. They are both distributed to the muscles of the larynx and pharynx.

Reddle. A species of ochre or argillaceous earth, of a dark red colour, sometimes used medicinally as a tonic and antacid.

Red saunders. See *Pterocarpus santalinus.*

REFRIGERA'NTIA. (From *refrigero,* to cool.) Refrigerants. Medicines, which allay the heat of the body or of the blood.

REFRIGERATO'RIUM. (From *refrigero,* to cool.) A vessel filled with water to condense vapours, or to make cool any substance which passes through it.

RE'GIMEN. (From *rego,* to govern.)

A term employed in medicine to express the plan or regulation of the diet.

Regi'na pra'ti. See *Spiræa ulmaria.*

Regions abdominal. See *Body.*

Re'gius mo'rbus. (From *rex*, a king.) The royal disease, a term applied to the jaundice from its golden colour; as is *aqua regia* to a mixture of nitric and muriatic acids, because it alone dissolves gold.

Regular gout. See *Arthritis.*

Re'gulus. (Dim. of *rex*, a king; so called because the alchemists expected to find gold, the king of metals, collected at the bottom of the crucible after fusion.) A name given by the alchemists to metallic matters when separated from other substances by fusion; as, regulus of antimony, regulus of arsenic, &c.

Regulus of antimony. The pure metal antimony. See *Antimony.*

Regulus of arsenic. Pure metallic arsenic. See *Arsenic.*

Reme'dium divi'num. See *Imperatoria.*

Remittent fever. See *Febris Intermittens.*

Re'mora ara'tri. (From *remoror*, to hinder, and *aratrum*, a plough; so called because it hinders the plough.) See *Ononis spinosa.*

Remote cause. See *Exciting cause.*

REN. (*Ren*, *-nis*, m. *Ren*, *απο του ρειν*; because through them the urine flows.) The kidney. See *Kidneys.*

RENAL ARTERIES. Arteriæ renales. See *Emulgent.*

RENAL GLANDS. *Glandulæ renales.* Renal capsules. Supra-renal glands. The supra-renal glands are two hollow bodies, like glands in fabric, and placed one on each side upon the kidney. They are covered by a double tunic, and their cavities are filled with a liquor of a brownish red colour. Their figure is triangular; and they are larger in the fœtus than the kidneys; but in adults they are less than the kidneys. The right is affixed to the liver, the left to the spleen and pancreas, and both to the diaphragm and kidneys. They have arteries, veins, lymphatics, and nerves; their arteries arise from the diaphragmatic, the aorta, and the renal arteries. The vein of the right supra-renal gland empties itself into the vena cava; that of the left into the renal vein; their lymphatic vessels go directly to the thoracic duct; they have nerves common alike to these glands and the kidneys. They have no excretory duct, and their use is at present unknown. It is supposed they answer one use in the fœtus, and another in the adult, but what these uses are is uncertain. Boerhaave supposed their use to consist in their furnishing lymph to dilute the blood returned after the secretion of the urine in the renal vein; but this is very improbable, since the vein of the right supra-renal gland goes to the vena cava, and the blood carried back by the renal vein wants no dilution. It has also been said, that these glands not only prepare lymph, by which the blood is fitted for the nutrition of the delicate fœtus; but that in adults they serve to restore to the blood of the vena cava the irritable parts which it loses by the secretion of bile and urine. Some, again, have considered them as diverticula in the fœtus, to divert the blood from the kidneys, and lessen the quantity of urine. The celebrated Morgagni believed their office to consist in conveying something to the thoracic duct. It is singular, that in children who are born without the cerebrum, these glands are extremely small, and sometimes wanting.

RENAL VEINS. See *Emulgent.*

Renal vessels. See *Emulgent.*

Rennet, or **Runnet.** The gastric juice and contents of the stomach of calves. It is much employed in preparing cheese, and, in pharmacy, for making whey. To about a pound of milk, in a silver or earthen basin placed on hot ashes, add three or four grains of rennet, diluted with a little water; as it becomes cold the milk curdles, and the whey, or serous part, separates itself from the caseous part. When these parts appear perfectly distinct, pour the whole upon a strainer, through which the whey will pass, while the curds remain behind. This whey is always rendered somewhat whitish, by a very small and much divided portion of the caseous part; but it may be separated in such a manner, that the whey will remain limpid and colourless, and this is what is called clarifying it. Put into a basin the white of an egg, a glass of the serum of milk, and a few grains of tartaric acid in powder; whip the mixture with an ozier twig, and, having added the remainder of the unclarified whey, place the mixture again over the fire until it begins to boil. The tartaric acid completes the coagulation of the white part of the milk which remains; the white of egg, as it becomes hot, coagulates and envelopes the caseous part. When the whey is clear, filter it through paper; what passes will be perfectly limpid, and have a greenish colour. This is clarified whey.

Re'nuens. (From *renuo*, to nod the head back in sign of refusal; so called from its office of jerking back the head.) A muscle of the head.

REPELLE'NTIA. (From *repello*, to drive back.) Repellents. Applications are sometimes so named which make diseases recede, as it were, from the surface of the body.

REPULSION. All matter possesses a power which is in constant opposition to attraction. This agency, which is equally powerful and equally obvious, acts an important part in the phenomena of nature, and is called *the power of repulsion.*

That such a force exists which opposes the approach of bodies towards each other is evident from numberless facts.

Newton has shown that when a convex lens is put upon a flat glass it remains at a distance of the one-hundred-and-thirty-seventh part of an inch, and a very considerable pressure is required to diminish this distance; nor does any force which can be applied bring them into actual mathematical contact; a force may indeed be applied sufficient to break the glasses into pieces, but it may be demonstrated that it does not diminish their distance much beyond the one-thousandth part of an inch. There is, therefore, a repulsive force which prevents the two glasses from touching each other.

Boscovich has shown that when an ivory billiard-ball sets another in motion by striking against it, an equal quantity of its own motion is lost, and the ball at rest begins to move while the other is still at a distance.

There exists, therefore, a repulsion between bodies; this repulsion takes place while they are yet at a distance from each other; and it opposes their approach towards each other.

The cause or the nature of this force is equally inscrutable with that of attraction, but its existence is undoubted: it increases, as far as has been ascertained, inversely as the square of the distance, consequently at the point of contact it is infinite.

The following experiments will serve to prove the energy of repulsion more fully.

Experiment.—When a glass tube is immersed in water, the fluid is attracted by the glass, and drawn up into the tube; but, if we substitute mercury instead of water, we shall find a different effect. If a glass tube of any bore be immersed in this fluid it does not rise, but the surface of the mercury is considerably below the level of that which surrounds it when the diameter of the tube is very small.

In this case, therefore, a repulsion takes place between the glass and the mercury, which is even considerably greater than the attraction existing between the particles of the mercury, and hence the latter cannot rise in the tube, but is repelled, and becomes depressed.

Experiment.—When we present the north pole of a magnet A, to the same pole of another magnet B, suspended on a pivot, and at liberty to move, the magnet B will recede as the other approaches; and by following it with A, at a proper distance, it may be made to turn round on its pivot with considerable velocity.

In this case there is evidently some agency which opposes the approach of the north poles of A and B, which acts as an antagonist, and causes the moveable magnet to retire before the other. There is therefore a *repulsion* between the two magnets, a repulsion which increases with the power of the magnets; which may be made so great that all the force of a strong man is insufficient to make the two north poles touch each other. The same repulsion is equally obvious in electrical bodies, for instance;

Experiment.—If two small cork balls be suspended from a body so as to touch one another, and if we charge the body in the usual manner with electricity, the two cork balls separate from each other, and stand at a distance proportional to the quantity of electricity with which the body is charged; the balls of course repel each other.

Experiment.—If we rub over the surface of a sheet of paper the fine dust of lycopodium or puff ball, and then let water fall on it in small quantities, the water will instantly be repelled, and form itself into distinct drops, which do not touch the lycopodium, but roll over it with uncommon rapidity. That the drops do not touch the lycopodium but are actually kept at a distance above it, is obvious from the copious reflection of white light.

Experiment.—If the surface of water contained in a basin be covered over with lycopodium, a solid substance deposited at the bottom of the fluid may be taken out of it with the hand without wetting it. In this case the repulsion is so powerful as to defend the hand completely from the contact of the fluid.

Res natura′les. (From *natura*, nature.) The naturals. According to Boerhaave, these are life, the cause of life, and its effects. These, he says, remain in some degree, however disordered a person may be.

Rese′da. (From *resedo*, to appease; so called from its virtue of allaying inflammation.) The herb wild rocket.

Resin, black. See *Resina nigra.*

Resin, elastic. See *Indian rubber.*

Resin tree, elastic. See *Indian rubber.*

Resin, white. See *Resina alba.*

Resin, yellow. See *Resina flava.*

RESI′NA. (*Resina*, from ρεω, to flow.) Resin. The essential properties of resin are, being in the solid form, insoluble in water, perfectly soluble in alkohol, and in essential and expressed oils, and being incapable of being volatilized without decomposition.

Resins are obtained chiefly from the vegetable kingdom, either by spontaneous exudation, or from incisions made into vegetables affording juices which contain this principle. These juices contain a portion of essential oil, which, from exposure to the air, is either volatilized or converted into resinous matter, or sometimes the oil is abstracted by distillation. In some plants the resin is deposited, in a concrete state, in the interstices of the wood, or other parts of the plant.

Resins, when concrete, are brittle, and have generally a smooth and conchoidal fracture; their lustre is peculiar, they are more or less transparent, and of a colour which is usually some shade of yellow, or brown; they are of a greater specific gravity than water; they are often odorous and sapid, easily fusible, and, on cooling, become solid.

Resi'na a'lba. The inspissated juice of the *Pinus sylvestris*, &c. is so called; and sometimes the residuum of the distillation of oil of turpentine. See *Resina flava.*

Resi'na ela'stica. See *Indian rubber.*

RESI'NA FLA'VA. *Resina alba.* Yellow resin, what remains in the still after distilling oil of turpentine, by adding water to the common turpentine. It is of very extensive use in surgery as an active detergent, and forms the base of the *unguentum resinæ flavæ.*

RESI'NA LU'TEA NO'VI BE'LGII. Botany-bay gum. All the information that has been hitherto collected respecting the history of the yellow gum is the following:

The plant that produces it is low and small, with long grassy leaves; but the fructification of it shoots out in a singular manner from the centre of the leaves, on a single straight stem, to the height of twelve or fourteen feet. Of this stem, which is strong and light, like some of the reed class, the natives usually make their spears. The resin is generally dug up out of the soil under the tree, not collected from it, and may, perhaps, be that which Tasman calls "gum lac of the ground."

Mr. Boles, surgeon of the Lady Penrhyn, gives a somewhat different account; and as this gentleman appears to have paid considerable attention to the subject, his account may certainly be relied upon. After describing the tree in precisely the same manner as above, he observes, that at the top of the trunk of the tree, long grassy leaves grow in great abundance. The gum is found under these leaves in considerable quantities; it commonly exudes in round tears, or drops, from the size of a large pea to that of a marble, and sometimes much larger. These are, by the heat of the sun, frequently so much softened, that they fall on the ground, and in this soft state adhere to whatever they fall upon; hence the gum is frequently found mixed with dirt, wood, the bark of the tree, and various other substances: so that one lump has been seen composed of many small pure pieces of various sizes united together, which weighed nearly half a hundred weight. It is produced in such abundance, that one man may collect thirty or forty pounds in the space of a few hours. The convicts have another method of collecting it: they dig round the tree, and break off pieces of the roots which always have some, and frequently considerable quantities of the gum in them. This gum appears nearly, but not entirely, the same as that which exudes from the trunk of the tree; the former is often mixed with a strong smelling resinous substance of a black nature, and is so interwoven in the wood itself, that it is with difficulty separated. The latter appears a pure unmixed resinous substance.

Several experiments have been made, principally with the view of determining what menstruum would dissolve the gum the most readily, and in the greatest quantity, from which it appears alkohol and ether dissolve the most.

The diseases in which this resin is administered, are those of the primæ viæ, and principally such as arise from spasm, a debility, a loss of tone, or a diminished action in the muscular fibres of the stomach and bowels, such as loss of appetite, sickness, vomiting, flatulency, heart-burn, pains in the stomach, &c. when they were really idiopathic complaints, and not dependent upon any disease in the stomach, or affections of other parts of the body communicated to the stomach. In debilities and relaxations of the bowels, and the symptoms from thence arising, such as purging and flatulency, it has been found of good effect. In certain cases of diarrhœa, however, (and it seemed those in which an unusual degree of irritability prevailed,) it did not answer so well, unless given in small doses, and combined with opiates, when the patient seemed to gain greater advantage than when opiates only were had recourse to. In cases of amenorrhæa, depending on (what most of those cases do depend upon) a sluggishness, a debility, and flaccidity of the system, this medicine, when assisted by proper exercise and diet, has, by removing the symptoms of dyspepsia, and by restoring the tone and action of the muscular fibres, been found very serviceable. This medicine does not, in the dose of about half a drachm, appear to possess any remarkably sensible operation. It neither vomits, purges, nor binds the belly, nor does it materially increase the secretion of urine or perspiration. It has, indeed, sometimes been said to purge, and at others to occasion sweating, but they are not constant effects, and when they do occur, it generally depends on some accidental circumstance. It should seem to possess, in a very extensive degree, the property of allaying morbid irritability, and of restoring tone, strength, and action, to the debilitated and relaxed fibre. When the gum itself is given, it should always be the pure unmixed part; if given in the form of a draught, it should be mixed in water with mucilage of gum arabic; if made into pills, a small portion of Castile soap may be employed; it was found the lixiv. sapon. dissolved it entirely. It is commonly, however, made into a tincture by mixing equal parts of the gum and rectified spirit; one drachm of this tincture, (containing half a drachm of the pure gum,) made into a draught with water and syrup, by the assistance of fifteen grains of gum arabic in mucilage, forms an elegant medicine, and at the same time very palatable.

Resi'na ni'gra. *Colophonia.* What remains in the retort after distilling the balsam of turpentine from the common turpentine. This name is also given in the London Pharmacopœia to pitch.

RESOLVENTS. (*Medicamenta Resolventia,* from *resolvo,* to loosen.) This term is applied by surgeons to such substances as discuss inflammatory tumours.

RESOLUTION. (*Resolutio,* from *resolvo,* to loosen.) A termination of inflammatory affections in which the diseases disappear without any abscess, mortification, &c. being occasioned. The term is also applied to the dispersion of swellings, indurations, &c.

RESPIRATION. (*Respiratio,* from *respiro,* to take breath.) Of all the changes the blood suffers in passing through our various organs, there are none more essential or remarkable than those occasioned by the influence of the air, which is alternately received into, and expelled from the lungs during the act of respiration. The blood which the veins return to the heart, and which the right ventricle sends into the pulmonary artery, is blackish and heavy; its temperature only 30 degrees of Reaumur's thermometer: if suffered to remain still, it coagulates slowly, and separates a great portion of serum. That which the pulmonary veins bring back to the left cavities of the heart, and which is conveyed into every part of the body by means of the arteries, is on the contrary of a red vermillion colour, frothy, lighter, and two degrees warmer; it is also more easily coagulable, and separates a smaller proportion of serum. All these differences, which are so easily perceptible, are dependent upon the modifications arising from having been in contact with the atmospheric air.

In man, and in all animals of warm blood that have a heart composed of two auricles and two ventricles, the blood which has been carried into all the organs by the arteries, and brought back by the veins to the heart, cannot be returned into the arteries without having first passed through the lungs, forming a medium which the blood must necessarily traverse to pass from the right into the left cavities of the heart; this passage constitutes the pulmonary or smaller circulation.

Mayow has given the most accurate idea of the respiratory organ, in comparing it to a pair of bellows, in the inside of which was an empty bladder, the neck of which was adapted to the instrument, and gave entrance to a column of air when its parietes were separated: the air, in fact, does not enter the lungs but when the thorax dilates and enlarges by the separation of its parietes. To effect respiration, which may be defined the alternate entrance and egress of air in the lungs, the thorax must expand to receive the air, and contract to expel it. The dilatation is called inspiration, the contraction expiration; the latter is always shorter than the other, its causes are more mechanical, and the muscular powers have less influence.

The thorax in its usual state dilates only by depressing the diaphragm. The curved fibres of this muscle are made straight by contraction, which causes it to descend towards the abdomen, and thus depressing its viscera, push forwards the anterior parietes of this cavity, which sink down when expiration succeeds; the diaphragm is then relaxed and ascends, being pressed back by the abdominal viscera, on which the large muscles re-act. When we have occasion for the admission of a great quantity of air into the chest, it not only enlarges in length by the descent of the diaphragm, but its capacity is likewise increased in every direction. The intercostal muscles then contract, and approximate the ribs between which they are placed; yet the intercostal spaces become larger, particularly at the anterior part; for whenever oblique lines tend to become perpendicular to a vertical line, and to form right angles with it, the intercepted spaces augment in proportion as the lines, having been more oblique, approach the horizontal direction; besides, as the ribs present a double curvature in respect to their length, one on the front, the other on their sides, the convexity of the former is outwards, they separate from the axis of the chest, the cavity of which is enlarged transversely, while the latter curvature, agreeable to its edges being augmented by a true rotatory motion, has its inferior edge pushed forwards. The thorax therefore increases both in its right and transverse diameter, each of which has been estimated to expand two lines; the extension of the vertical diameter dependent on the descent of the diaphragm is much more considerable.

When any cause prevents the diaphragm from descending towards the abdomen, or in any other manner impedes the motion of inspiration, not only the intercostal muscles evidently act to induce a dilatation of the thorax, but also several other auxiliary muscles, as the scaleni subscapulares, pectorales, serrati majores, latissimi dorsi, in contracting raise the ribs, and increase the diameter of the thorax in several directions; the fixed point of these muscles should then be their moveable part, because the cervical spine, the clavicle, scapula and humerus are fixed by other powers which it would be needless to enumerate. Inspiration is a state truly active, an effort of the contractile organs, which must cease, when they fall into a state of relaxation. Expiration, which succeeds, is a passive motion in which few muscles co-operate, and chiefly depends on the re-action of the elastic parts constituting the structure of the parietes of the chest. It has been seen that the cartilages of the ribs experience a degree of rotation, carrying their upper edge backwards and downwards: when the cause that is productive of this action ceases to act, the parts return upon themselves, and carry back the sternum on the spine, towards which the ribs descend by their own gravity. The diaphragm is pushed nearer the thorax by the abdominal viscera, on which the large muscles of the abdomen re-act.

In every effort of expiration, as coughing and vomiting, the muscles not only re-act in consequence of their own elasticity, but they still farther contract and approximate the spine, propelling the viscera towards the thorax. The musculus triangularis of the sternum, the subcostales, and the serratus minor inferior may be ranked among the expiratores, but they are seldom employed, and form too slender and weak powers to contribute much to the contraction of this cavity. When the chest enlarges, the lungs dilate, following the parietes which expand, and each time the thorax dilates in an adult man, from thirty to forty cubic inches of atmospheric air enter into the lungs. After the atmospheric air has remained for some time in the pulmonary structure, it is expelled by the efforts of expiration, and its quantity is a little diminished. Likewise its composition is not the same: there is found certainly the same proportion of azote, but the oxygen, its vital and respirable part, has suffered great diminution, usually above one-third, the place of which is supplied by an equal bulk of carbonic acid. It is likewise altered by the admixture of an aqueous vapour, which condenses in cold weather in passing out of the nostrils and mouth. This is known by the name of the humour of pulmonary exhalation. It has been supposed to be formed by part of the oxygen of the air combining with hydrogen, furnished by the blood: but as the oxygen consumed appears to be equivalent only to that, which the carbonic acid contains, this notion cannot now be entertained; and we may consider the aqueous vapour as secreted from the blood. These changes, compared with those the blood has suffered in its passage through the lungs, manifestly indicate a reciprocal action of this liquid and the oxygen of the atmosphere. The dark venous blood, slow of coagulation, and separating much serum, loaded with carbon, and having only thirty degrees of heat, gives off to the oxygen of the atmosphere its carbon, to constitute the carbonic acid, and, as oxygen cannot enter this new combination without disengaging a portion of caloric, which rarefies it into gas, the blood seizes this heat, now liberated with so much greater facility as it proportionably loses its carbon, since according to the ingenious experiments of Crawford, its capacity for caloric thereby augments in the relation of 10 : 11.5.

The blood then, in its passage through the lungs, is deprived of carbon and water, and, in becoming arterial, is loaded with caloric, which enables it to maintain the temperature of the body. It was supposed that oxygen, is also absorbed; but the most accurate experiments do not countenance this notion.

Arterial blood becomes venous when any cause suspends or retards its course, as proved by the following experiment of J. Hunter. He tied the carotid of a dog in two places, at about four inches distance; the blood which came out of that portion of the artery between the ligatures, when opened several hours afterwards, was coagulated and dark like that of the veins.

The blood flowing in small veins very much resembles that of the arteries; and often in a copious bleeding the colour of the blood, at first very dark, becomes gradually paler, so that, towards the end of the operation, the blood which flows exhibits more the qualities of that in the arteries, which is occasioned by affording a more easy and direct passage to the blood from the arteries into the veins by emptying the venous system.

By means of the absorption of caloric by the blood, we can explain how the function of respiration continues to influence every part of the body, and give rise to heat uniformly spread throughout all our organs. In proportion as the blood loses the arterial character, it gives out its caloric, for which its affinity or capacity diminishes as it becomes venous. If the lungs were the only organs in which the matter of heat could be disengaged, the temperature of these viscera should be very considerably higher than that of other parts, and experience proves that it is not.

Rest harrow. See *Ononis.*

Re´sta bo´vis. The rest harrow is so called because it hinders the plough; hence *resta bovis.* See *Ononis.*

RESUSCITATION. The restoring of persons apparently dead, to life. Under this head, strictly speaking, is considered the restoring of those who faint, or have breathed noxious air; yet it is chiefly confined to the restoring of those who are apparently dead from being immersed in a fluid, or by hanging. Dr. Curry, of Guy's Hospital, has written a very valuable treatise on this subject; and such is its importance, that we have thought proper to insert the following account:

"From considering," he observes, "that a drowned person is surrounded by water instead of air, and that in this situation he makes strong and repeated efforts to breathe, we should expect that the water would enter and completely fill the lungs. This opinion, indeed, was once very general, and it still continues to prevail among the common people. Experience, however, has shown, that unless the body lies so long in the water as to have its living principle entirely destroyed, the quantity of fluid present in the lungs is inconsiderable; and it would seem that some of this is the natural moisture of the part accumulated; for, upon drowning kittens, puppies, &c. in ink, or other coloured liquors, and afterwards examining the lungs, it is found that very little of the coloured liquor has gained admittance to them. To explain the reason why the lungs of drowned animals are so free from water, it is necessary to observe, that the muscles which form the opening into the wind-pipe are exquisitely sensible, and contract violently upon the least irritation, as we frequently experience when any part of the food or drink happens to touch that part. In the efforts made by a drowning person, or animal, to draw in air, the water rushes into the mouth and throat, and is applied to these parts, which immediately contract in such a manner as to shut up the passage into the lungs. This contracted state continues as long as the muscles retain the principle of life, upon which the power of muscular contraction depends; when that is gone, they become relaxed, and the water enters the windpipe, and completely fills it. On dissecting the body of a recently-drowned animal, no particular fulness of the vessels within the skull, nor any disease of the brain or its membranes, are visible. The lungs are also sound, and the branches of the windpipe generally contain more or less of a frothy matter, consisting chiefly of air, mixed with a small quantity of colourless fluid. The *right* cavity of the heart, and the trunks of the large internal veins which open into it, and also the trunk and larger branches of the artery which carries the blood from this cavity through the lungs, are all distended with dark-coloured blood, approaching almost to blackness. The *left* cavity of the heart, on the contrary, is nearly, or entirely empty, as are likewise the large veins of the lungs which supply it with blood, and the trunk and principal branches of the great artery which conveys the blood from hence to the various parts of the body. The external blood-vessels are empty; and the fleshy parts are as pale as if the animal had been bled to death. When a body has lain in the water for some time, other appearances will also be observable; such as, the skin livid, the eyes blood-shot, and the countenance bloated and swoln; but these appearances, though certainly unfavourable, do not absolutely prove that life is irrecoverably gone. It is now known, that in the case of drowning, no injury is done to any of the parts essential to life; but that the *right* cavity of the heart, together with the veins and arteries leading to and from that cavity, are turgid with blood, whilst every other part is almost drained of this fluid. The practice of holding up the bodies of drowned persons by the heels, or rolling them over a cask, is unnecessary; the lungs not being filled with any thing that can be evacuated in this way. Therefore such a practice is highly dangerous, as the violence attending it may readily burst some of those vessels which are already overcharged with blood, and thus convert what was only suspended animation, into absolute and permanent death. The operation of inflating the lungs is a perfectly safe, and much more effectual method of removing any frothy matter they may contain; and whilst it promotes the passage of the blood through them, also renders it capable of stimulating the *left* cavity of the heart, and exciting it to contraction. As soon as the body is taken out of the water, it should be stripped of any clothes it may have on, and be immediately well dried. It should then be wrapped in dry, warm blankets, or in the spare clothes taken from some of the by-standers, and be removed as quickly as possible to the nearest house that can be got convenient for the purpose. The fittest will be one that has a tolerably large apartment, in which a fire is ready, or can be made. The body may be carried in men's arms, or laid upon a door; or, in case the house be at a distance from the place, if a cart can be procured, let the body be placed in it, on one side, upon some straw, with the head and upper part somewhat raised; and in this position a brisk motion will do no harm. Whatever be the mode of conveyance adopted, particular care should be taken that the head be neither suffered to hang backwards, nor to bend down with the chin upon the breast. When arrived at the house, lay the body on a mattress, or a double blanket, spread upon a low table, or upon a door supported by stools; the head and chest being elevated by pillows. As the air of a room is very soon rendered impure by a number of people breathing in it, for this reason, as well as to avoid the confusion and embarrassment attending a crowd, no more persons should be admitted into the apartment where the body is placed, than are necessary to assist immediately in the recovery: in general *six* will be found sufficient for this purpose, and these should be the most active and intelligent of the by-standers. It will be found most convenient to divide the assistants into two sets; one set being employed in restoring the heat of the body, while the other institutes an artificial breathing in the best manner they are able. Every skilful person should be provided with a flexible tube made of elastic gum, half a yard in length, to introduce into the wind-pipe, and also with a similar tube to which a syringe can be affixed, to be put into the œsophagus. Should these not be at hand, air should be thrown into the lungs in the best manner that can be suggested at the time. Should it still be found that the air does not pass readily into the lungs, immediate recourse must be had to another and more effectual method for attaining that object. As this method, however, requires address, and also some knowledge of the parts about the throat, we would recommend that when there is not a medical gentleman present, the mode already described be tried repeatedly before this be attempted. As a quantity of frothy matter occupying the branches of the wind-pipe, and preventing the entrance of the air into the lungs, is generally the circumstance which renders this mode of inflation necessary, the mouth should be opened from time to time to remove this matter as it is discharged. While one set of the assistants are engaged in performing artificial respiration, the other should be employed in communicating heat to the body. The warm-bath has been usually recommended for this purpose; but wrapping the body in blankets, or woollen cloths, strongly wrung out of warm water, and renewing them as they grow cool, besides being a speedier and more practicable method of imparting heat, has this great advantage, that it admits of the operation of inflating the lungs being carried on without interruption. Until a sufficient quantity of warm water can be got ready, other methods of restoring warmth may be employed; such as the application of dry warm blankets round the body and limbs; bags of warm grains or sand, bladders or bottles of hot water, or hot bricks applied to the hands, feet, and under the arm-pits, the bottles and bricks being covered with flannel: or the body may be placed before the fire, or in the sunshine, if strong at the time, and be gently rubbed by the assistants with their warm hands, or with clothes heated at the fire by a warming-pan. The restoration of heat should always be gradual, and the warmth applied ought never to be greater than can be comfortably borne by the assistants. If the weather happen to be cold, and especially if the body has been exposed to it for some time, heat should be applied in a very low degree at first: and if the weather be under the freezing point, and the body, when stripped, feel cold and nearly in the same condition with one that is frozen, it will be necessary at first to rub it well with snow, or wash it with cold water; the sudden application of heat in such cases, having been found very pernicious. In a short time, however, warmth must be gradually applied. To assist in rousing the activity of the vital principle, it has been customary to apply various stimulating matters to different parts of the body. But as some of these applications are in themselves hurtful, and the others serviceable only according to the time and manner of their employment, it will be proper to consider them particularly. The application of all such matters in cases of apparent death, is founded upon the supposition that the skin still retains sensibility enough to be affected by them. It is well known, however, that even during life, the skin loses sensibility in proportion as it is deprived of heat, and does not recover it again until the natural degree of warmth be restored. Previous to the restoration of heat, therefore, to a drowned body, all stimulating applications are useless, and so far as they interfere with the other measures, are also prejudicial. The practice of rubbing the body with salt or spirits is now justly condemned. The salt quickly frets the skin, and has, in some cases, produced sores, which were very painful and difficult to heal after recovery. Spirits of all kinds evaporate fast, and thereby, instead of creating warmth, as they are expected to do, carry off a great deal of heat from the body. Spirit of hartshorn, or of sal volatile, are liable to the same objection as brandy or other distilled spirits, and are besides very distressing to the eyes of the assistants. When there is reason to think the skin has in any degree recovered its sensibility, let an assistant moisten his hand with spirit of hartshorn, or *eau de luce*, and hold it closely applied to one part: in this way evaporation is prevented, and the full stimulant effect of the application obtained. A liniment composed of equal parts of spirit of hartshorn and sallad oil, well shaken together, would appear to be sufficiently stimulating for the purpose, and as it evaporates very slowly, will admit of being rubbed on without producing cold. The places to which such remedies are usually applied, are, the wrists, ankles, temples, and the parts opposite the stomach and heart. The intestines, from their internal situation and peculiar constitution, retain their irritability longer than the other parts of the body, and, accordingly, various means have been proposed for increasing the action of their fibres, in order to restore the activity of the whole system. Tobacco-smoke, injected by way of clyster, is what has been generally employed with this view, and the *fumigator*, or instrument for administering it, makes a part of the apparatus which is at present distributed by the different societies established for the recovery of drowned persons. Of late, however, the use of tobacco-smoke has been objected to, and upon very strong grounds; for when we consider that the same remedy is successfully employed with the very opposite intention, namely, that of lessening the power of contraction in the muscles, and occasioning the greatest relaxation consistent with life, it must be acknowledged to be a very doubtful, if not dangerous remedy, where the powers of life are already nearly exhausted. Instead of tobacco-smoke then, we would recommend a clyster, consisting of a pint or more of water, moderately warmed, with the addition of one or two table-spoonsful of spirit of hartshorn, a heaped tea-spoonful of strong mustard, or a table-spoonful of essence of peppermint; in defect of one or other of these, half a gill or more, of rum, brandy, or gin may be added, or the warm water given alone. This step, however, need not be taken, until artificial respiration has been begun; for it will answer but little purpose to stimulate the heart through the medium of the intestines, unless we, at the same time, supply the left cavity with blood fitted to act upon it; which we cannot do without first removing the collapsed state of the lungs, and promoting the passage of the blood through them by a regular inflation. As the stomach is a highly sensible part, and intimately connected with the heart and brain, the introduction of some moderately warm and stimulating liquor into it, seems well calculated to rouse the dormant powers of life. This is very conveniently done by means of the syringe and flexible tube. The quantity of fluid thrown in ought not to exceed half a pint, and may be either warm negus, or water with the addition of one or other of the stimulating matters recommended above, using, however, only half the quantities mentioned there. As soon as the pulse or beating of the heart can be felt, the inside of the nostrils may be occasionally touched with a feather dipt in spirit of hartshorn, or sharp mustard; it being found by experience, that any irritation given to the nose, has considerable influence in exciting the action of the muscles concerned in respiration. When the natural breathing commences, the flexible tube and canula should be withdrawn, and any farther inflation that may be necessary, performed by blowing into the nostril. Letting blood has been generally thought requisite in every case of suspended animation. The practice, however, does not appear to have been founded upon any rational principle at first, and it has been continued from the force of custom, rather than from any experience of its good effects. In the case of drowned persons there is not, as in those who suffer from hanging or apoplexy, any unusual fulness of the vessels of the brain; and the quantity of blood that can be drawn from the external veins, will not sensibly diminish the accumulation of it in those near the heart. Besides, blood-letting, which always tends to *lessen* the action of the heart and arteries in the living body, cannot be supposed to have a directly opposite effect in cases of apparent death; on the contrary, if employed here, it will hazard the entire destruction of those feeble powers which yet remain, and to increase and support which all our endeavours should be directed. When the several measures recommended above have been steadily pursued for an hour or more, without any appearance of returning life, electricity should be tried; experience having shown it to be one of the most powerful stimuli yet known, and capable of exciting contraction in the heart and other muscles of the body, after every other stimulus had ceased to produce the least effect. Moderate shocks are found to answer best, and these should, at intervals, be passed through the chest in different directions, in order, if possible, to rouse the heart to act. Shocks may likewise be sent through the limbs, and along the spine; but we are doubtful how far it is safe or useful to pass them through the brain, as some have recommended. The body may be conveniently insulated, by placing it on a door, supported by a number of quart bottles, whose sides are previously wiped with a towel, to remove any moisture they may have contracted. By experiments made on different animals, it is found that the blood passes through the lungs most readily when they are fully distended with air; consequently, that if the lungs of a drowned person are inflated, and kept in the expanded state whilst the electric shock is passed through the chest, the blood accumulated in the *right* cavity of the heart and its vessels, will move forward without any resistance, should the heart be brought to contract upon it. As soon as the shock is given, let the lungs be emptied of the air they contain, and filled again with fresh air; then pass another shock, and repeat this until the heart is brought into action, or until it appear that all farther attempts are useless. In order more certainly to pass the shock through the heart, place the knob of one discharging rod above the collar-bone of the right side, and the knob of the other above the short ribs of the left: the position of the discharging rods, however, may be changed occasionally, so as to vary the direction of the shock. Two thick brass wires, each about eighteen inches long, passed through two glass tubes, or wooden cases, well varnished, and having at one end a knob, and at the other a ring to fasten the brass chain to, form very convenient discharging rods; and by means of them, the shock may be administered without the risk of its being communicated to the assistants, or carried off by the skin being wet. When the patient is so far recovered as to be able to swallow, he should be put into a warm bed, with his head and shoulders somewhat raised by means of pillows. Plenty of warm wine-whey, ale-posset, or other light and moderately nourishing drink, should now be given, and gentle sweating promoted, by wrapping the feet and legs in flannels well wrung out of hot water. If the stomach and bowels feel distended and uneasy, a clyster, consisting of a pint of warm water, with a table-spoonful of common salt, or an ounce or more of Glauber's or Epsom salt, dissolved in it, may be administered. The general practice, in this case, is to give an emetic; but considering that the powers of the machine are still very weak, the agitation of vomiting is certainly hazardous. The patient should on no account be left alone, until the senses are perfectly restored, and he be able to assist himself; several persons having relapsed and been lost, from want of proper attention to them, after the vital functions were, to all appearance, completely established. Either from the distension which the arteries of the lungs have suffered, or from the sudden change from great coldness to considerable warmth, it now and then happens, that the patient is attacked, soon after recovery, with inflammation of some of the parts within the chest. This occurrence is pointed out by pain in the breast or side, increased on inspiration, and accompanied with frequent, and full or hard pulse, and sometimes with cough. Here the taking away some blood from the arm, or the application of cupping-glasses, leeches, or a blister, over the seat of the pain, will be very proper; but the necessity for these measures, as well as the time for putting them in practice, should be left to the judgment and discretion of a medical person. Dull pain in the head, lasting sometimes for two or three days, is by no means an unfrequent complaint in those who are recovered from this and from the other states of suspended animation; and here also a moderate bleeding from the neck, either with the lancet or with cupping-glasses, may prove serviceable.

In hanging, the external veins of the neck are compressed by the cord, and the return of the blood from the head thereby impeded, from the moment that suspension takes place; but as the heart continues to act for a few seconds after the wind-pipe is closed, the blood which is sent to the head during this interval, is necessarily accumulated there. Hence it is, that in hanged persons the face is greatly swoln, and of a dark red or purple colour: the eyes are commonly suffused with blood, enlarged, and prominent. On dissection, the blood-vessels of the brain are found considerably distended; but, in general, no further marks of disease appear within the skull. The lungs are found generally quite collapsed, and free from frothy matter. The heart and the large blood-vessels adjoining to it, exhibit the same appearances as in the bodies of drowned persons. From the great accumulation of blood in the vessels of the head, many have been of opinion, that hanging kills chiefly by inducing apoplexy; but the following experiment made at Edinburgh several years ago, by an eminent medical professor there, clearly proves, that in hanging as well as in drowning, the exclusion of air from the lungs is the immediate cause of death. A dog was suspended by the neck with a cord, an opening having been previously made in the wind-pipe, below the place where the cord was applied, so as to admit air into the lungs. In this state he was allowed to hang for three quarters of an hour, during which time the circulation and breathing went on. He was then cut down, without appearing to have suffered much from the experiment. The cord was now shifted below the opening into the wind-pipe, so as to prevent the ingress of air to the lungs; and the animal being again suspended, he was completely dead in a few minutes. Upon the whole, then, it appears, that the same measures recommended for drowned persons, are also necessary here; with this addition, that opening the jugular veins, or applying cupping-glasses to the neck, will tend considerably to facilitate the restoration of life, by lessening the quantity of blood contained in the vessels of the head, and thereby taking off the pressure from the brain. Except in persons who are very full of blood, the quantity taken away need seldom exceed an ordinary tea-cupful, which will in general be sufficient to unload the vessels of the head, without weakening the powers of life.

RE'TE. A net. A congeries of vessels, or any animal substance resembling a net.

RE'TE MALPI'GHII. The fine net-work of the extremities of the pulmonary arteries.

RE'TE MIRA'BILE. A net-work of blood-vessels in the basis of the brain of quadrupeds.

RE'TE MUCO'SUM. *Corpus reticulare. Corpus mucosum. Mucus Malpighii.* A mucous substance, deposited, in a net-like form, between the epidermis and cutis, which covers the sensible cutaneous papillæ, connects the epidermis with the cutis, and gives the colour to the body: in Europeans it is of a white colour, in Ethiopians black. See *Skin.*

RETICULAR. (*Reticularis*, from *rete*, a net.) Interwoven like a net.

RETIFORM. (*Retiformis*, from *rete*, a net, and *forma*, resemblance.) Net-like.

RE'TINA. (From *rete*, a net.) *Amphiblestroides.* The third or innermost membrane of the eye, expanded round the choroid coat, to the ciliary ligament. It is the true organ of vision, and is formed by an expansion of the pulp of the optic nerve.

RETINA'CULUM. (From *retineo*, to prop or restrain.) An instrument for keeping the bowels in their place.

RETORT. (*Retorta*, from *retorqueo*, to bend back again; probably so called because its neck was curved and bent back again.) A chemical vessel employed for many distillations, and most frequently for those which require a degree of heat superior to that of boiling water. They differ in form and materials: when pierced with a little hole in their roof, they are called tubulated retorts. They are made of common glass, stone-ware, and iron.

Retra'ctor a'nguli o'ris. See *Buccinator.*

RETRAHE'NTES AU'RIS. *Posterior auris,* of Winslow. *Retrahentes auriculæ,* of Albinus. *Deprimens auriculæ,* of Douglas. *Retrahentes auriculam,* of Cowper, and *mastoido-conchinien,* of Dumas. Two small bundles of muscular fibres which arise from the external and posterior part of the mastoid process of the temporal bone immediately above the insertion of the sterno-cleido-mastoideus muscle. They are inserted into that part of the back of the ear which is opposite to the septum which divides the concha and scapha. Their use is to draw the ear backwards, and stretch the concha.

Retrocedent gout. See *Arthritis.*

RETROVERSION. See *Uterus, retroversion of.*

REVERBERATORY FURNACE. See *Furnace.*

REVULSION. (*Revulsio,* from *revello,* to draw away.) An old term used by the humoral pathologists, signifying the drawing of humours a contrary way.

RHABA'RBARUM. (From *Rha,* and *barbarus,* wild; so called because it was brought from the banks of the Rha, now called the Wolga, in Russia.) See *Rheum.*

Rhaba'rbarum a'lbum. See *Convolvulus Mechoacanna.*

Rhaba'rbarum antiquo'rum. See *Rheum Rhaponticum.*

Rhaba'rbarum diosco'ridis. See *Rheum Rhaponticum.*

Rhaba'rbarum monacho'rum. See *Rumex patientia.*

Rhaba'rbarum Sibe'ricum. See *Rheum undulatum.*

Rhaba'rbarum tarta'ricum. See *Rheum.*

Rhaba'rbarum ve'rum. See *Rheum.*

Rhachia'lgia. (From ραχις, the spine of the back, and αλγος, pain.) A pain in the spine of the back.

RHA'CHIS. (Ῥαχις, the spine of the back.) See *Spine.*

Rhachisa'gra. (From ραχις, the spine of the back, and αγρα, a prey.) A species of gout fixed in the spine of the back.

Rhachi'ta. (From ραχις, the spine of the back.) A muscle belonging to the spine of the back.

Rhachi'tis. See *Rachitis.*

Rhaco'sis. (From ρακος, a rag.) A ragged excoriation of the relaxed scrotum.

RHA'GADES. (From ρηγνυμι, to break or bruise.) Chaps. Clefts. Malignant, dry, and deep cutaneous fissures.

Rhagoi'des. (From ραξ, a grape-stone, and ειδος, a likeness; so called from its likeness in colour to a grape-seed.) Applied to the retiform tunic of the eye.

Rha'mni Ba'ccæ. Buckthorn-berries.

RHA'MNUS. (From ραιω, to destroy, because of its many thorns.) 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Buckthorn.

2. The pharmacopœial name of the purging buckthorn. See *Rhamnus catharticus.*

Rha'mnus catha'rticus. The systematic name of the buckthorn. *Spina cervina. Rhamnus solutivus. Spina infectoria. Cervispina.* Purging buckthorn. The fruit or berries of this shrub, *Rhamnus: spinis terminalibus floribus quadrifidis dioicis, foliis ovatis, caule erecto,* of Linnæus, have been long received into the materia medica: they contain a pulpy deep green juice, of a faint unpleasant smell, a bitterish, acrid, nauseous taste, which operates briskly by stool, producing thirst, dryness of the mouth and fauces, and severe gripings, unless some diluting liquor be drank plentifully after it: at present it is rarely prescribed except as a drastic purge. The dose is said to be about twenty of the fresh berries in substance; twice or thrice that number in decoction; a drachm or a drachm and a half of the dried berries; an ounce of the expressed juice, or half an ounce of the rob or extract, obtained by inspissating the juice.

Rha'mnus fra'ngula. The systematic name of the black alder. *Frangula alnus. Alnus nigra.* This officinal tree is the *Rhamnus: inermis floribus monogynis hermaphroditis, foliis integerrimis,* of Linnæus.

All the parts of this tree, as well as of the common alder, are astringent and bitter. The bark is most astringent; a decoction of it has cured agues, and is often used to repel inflammatory tumours of the throat, by way of gargle. The inner yellow bark of the trunk, or root, given to ʒij., vomits, purges, and gripes; but, joined with aromatics, it operates more agreeably. An infusion, or decoction in water, inspissated to an extract, acts yet more mildly than these. It is mostly employed by the common people in dropsy and other disorders. The berries of alder are purgative. They are not in use under their own name, but are often substituted for buckthorn berries; to discover which, it should be observed, that the berries of the black alder have a black skin, a blue juice, and two seeds in each of them; whereas the buckthorn berries have a green juice, and commonly four seeds. The substitution of one for the other is not of material consequence, as the plants belong to the same genus, and the berries do not differ greatly.

Dr. Murray, of Gottingen, recommends, from his own experience, the leaves of alder chopped in small pieces, and heated over the fire, as the best remedy with which he is acquainted for dispersing milk in the breasts.

Rha'mnus zi'zyphus. The systematic name of the tree which affords the jujubs. See *Jujubæ.*

Rha'phanus. See *Raphanus.*

Rhapontic. A term applied to rhubarb.

Rhapontic rhubarb. See *Rheum rhaponticum.*

Rhapo'nticum. (The Rha of Pontus, *i. e.* the Rha, in Russia, a river on whose banks it grew.) See *Rheum rhaponticum.*

Rhapo'nticum vulga're officina'rum. See *Centaurea.*

RHATA'NIA. This substance has been long known to the manufacturers of port wine; it is the production of Peru, and is probably the root of the cinchona cordifolia. It is described as externally resembling the root of the rubia tinctorum, to the taste, being aromatic, bitter, and very astringent; its infusion or decoction turns black with sulphate of iron and precipitates tannin. The principal virtues appear to reside in the cortical part of the root which is thick and resinous. An opinion prevails that the substance sold in the shops under the name of foreign extract of bark is made from the rhatania.

It is well known that the medical virtues of this root are powerfully tonic. In debility of the digestive organs, in chronic rheumatism, fluor albus, and in intermittent fevers, it has been employed with good effect. While given in doses similar to cinchona, it has the advantage of being only one-third the price of that substance.

RHAZES, was born at Rei, in the province of Khorasan, about the year 852. He is said not to have commenced the study of medicine till more than thirty years old, having previously removed to Bagdad: but by indefatigable application he obtained the highest reputation; and was selected to superintend the celebrated hospital of that city. He has been considered as the Galen of the Arabians; and from his assiduous attention during the rest of a long life to the varieties of disease, he obtained the appellation of *the experienced.* He travelled much in pursuit of knowledge, particularly into his native country; and was much consulted by Almanzor, the chief of that province, to whom several of his writings are dedicated, as well as by other princes. Abi Osbaia enumerated 226 treatises composed by Rhazes, but only a few of these are preserved through the medium of Latin translations. The ten books, dedicated to Almanzor, were designed by him as a complete body of physic, and indeed may be regarded as the great magazine of all the Arabian medicine; the ninth book in particular, treating of the cure of diseases, was in such general estimation for several centuries, as to be used as a text-book by professors. However they contain little more than the substance of the writings of the Greek physicians; though certainly the small-pox, and a few other diseases, are first distinctly described by Rhazes. He was author also of the first treatise on the diseases of children. The use of chemical preparations in medicine appears likewise to have originated with him, or at least with some of the Arabians. He died in the year 932. Besides the ten books above mentioned, and the tract on Small-pox, there are extant by him a sort of common-place book, entitled "Continens;" and six books of Aphorisms, under the title of "De Secretis."

Rhe'i ra'dix. Rhubarb root.

Rheume. (From ρεω, to flow.) A defluxion, a common cold or catarrh.

RHE'UM. (From *Rha,* a river in Russia.) 1. The name of a genus of plants in the Linnæan system. Class, *Enneandria.* Order, *Trigynia.* Rhubarb.

2. The pharmacopœial name of the officinal rhubarb. See *Rheum palmatum.*

Rhe'um palma'tum. The systematic name of the officinal rhubarb. *Rhabarbarum. Rheon. Rhœum. Barbaria. Lapathum orientale. Lapathum chinense. Rhabarbarum verum. Rhabarbarum tartaricum.* Rhubarb. It was not until the year 1732 that naturalists became acquainted with any plant which seemed to afford the Rhabarbarum officinale; when some plants received from Russia by Jussieu at Paris, and Rhaud at Chelsea, were said to supply this important desideratum, and as such were adopted by Linnæus, in his first edition of the species Plantarum, under the name of *Rheum Rhabarbarum.* This, however, was not generally received as the genuine rhubarb plant; and with a view to ascertain this matter more completely, Kaw Boerhaave procured from a Tartarian rhubarb merchant the seeds of those plants whose roots he annually sold, and which were admitted at Petersburg to be the true rhubarb. These seeds were soon propagated, and were discovered by De Gorter to produce two distinct Species, viz. the *R. Rhabarbarum,* of Linnæus, or as it has since been called, the *R. Undulatum,* and another species, a specimen of which was presented to Linnæus, who declared it to be a new one; and it was first mentioned in the second edition of the species Plantarum, in 1762, by the name of *R. Palmatum.* Previous to this time De Gorter had repeatedly sent its seeds to Linnæus, but the young plants which they produced constantly perished; at length he obtained the fresh root, which succeeded very well at Upsall, and afterwards enabled the younger Linnæus to describe this plant, ann. 1767. But two years antecedent to this, Dr. Hope's account of the Rheum Palmatum, as it grew in the botanic garden near Edinburgh, had been read before the Royal Society at London; and of the great estimation in which this plant was held by him, we have the following proof: "From the perfect similarity of this root with the best foreign rhubarb, in taste, smell, colour, and purgative qualities, we cannot doubt of our being at last possessed of the plant which produces the true rhubarb, and may reasonably entertain the agreeable expectation of its proving a very important acquisition to Britain."

But from the relation we have given, it appears that both the seeds of the R. Palmatum, and the R. Undulatum, were transmitted to Petersburgh, as those of the true rhubarb; we are therefore to conclude, that the former species has an equal claim to this importance with the latter; and from further inquiries made in Russia there is the best authority for believing that the R. Compactum also affords this very useful drug. The seeds of the R. Palmatum were first introduced into Britain in 1762, by Dr. Hounsy (who sent them from Russia), and were supposed to be a part of that already mentioned; and since their prosperous cultivation by the late professor of botany at Edinburgh, the propagation of this plant has been gradually extended to most of our English gardens, and with a degree of success which promises in time to supersede the importation of the foreign root. Two sorts of rhubarb roots are usually imported into this country for medical use; viz. the Chinese and the Tartary rhubarb; the first is in oblong pieces, flattish on one side, and convex on the other; compact, hard, heavy, internally of a dull-red colour, variegated with yellow and white, and when recently powdered, appears yellow, but on being kept becomes gradually redder. The second is the most valuable, and is brought to us in roundish pieces, with a large hole through the middle of each; it is more soft and friable than the former sort, and exhibits, when broken, many streaks of a bright red colour. "The marks of the goodness of rhubarb are, the liveliness of its colour when cut; its being firm and solid, but not flinty or hard; its being easily pulverable, and appearing when powdered of a fine bright yellow colour; its imparting to the spittle when chewed a deep saffron tinge, and not proving slimy or mucilaginous in the mouth; its taste is subacrid, bitterish, and somewhat styptic; the smell lightly aromatic."

The purgative qualities of rhubarb are extracted more perfectly by water than by rectified spirit: the part remaining after the action of water is almost if not wholly inactive; whereas after repeated digestion in spirit, it proves still very considerably purgative. The virtue of a watery infusion, on being inspissated by a gentle heat is so much diminished, that a drachm of the extract is said to have scarcely any greater effect than a scruple of the root in substance. The spirituous tincture loses less; half a drachm of this extract proving moderately purgative. The qualities of this root, says Dr. Cullen, are that of a gentle purgative, and so gentle that it is often inconvenient on account of the bulk of the dose required, which in adults must be from ʒss. to ʒj. When given in a large dose it will occasion some griping, as other purgatives do; but it is hardly ever heating to the system, or shows the other effects of the more drastic purgatives. The purgative quality is accompanied with a bitterness, which is often useful in restoring the tone of the stomach when it has been lost; and, for the most part, its bitterness makes it sit better on the stomach than many other purgatives do. Its operation joins well with neutral laxatives; and both together operate in a lesser dose than either of them would singly. Some degree of stypticity is always evident in this medicine; and as this quality acts when that of the purgative has ceased, so in cases of diarrhœa, when any evacuation is proper, rhubarb has been considered as the most proper remedy to be employed. It must, however, be remarked here, that in many cases of diarrhœa, no further evacuation than what is occasioned by the disease, is necessary or proper. The use of rhubarb, in substance, for keeping the belly regular, for which it is frequently employed, is by no means proper, as the astringent quality is ready to undo what the purgative has done; but it is found that the purpose mentioned may be obtained by it, if the rhubarb is chewed in the mouth, and no more is swallowed than what the saliva has dissolved. And it must be remarked that in this way employed it is very useful to dyspeptic persons. Analogous to this, is the use of rhubarb in solution, in which it appears to me, that the astringent quality is not so largely extracted as to operate so powerfully as when the rhubarb was employed in substance.

The officinal preparations of this drug are, a watery and a vinous infusion, a simple and a compound tincture. It is also an ingredient in different compositions.

RHE'UM RHAPO'NTICUM. The systematic name of the rhapontic rhubarb. *Rhaponticum. Rhabarbarum dioscoridis. Rhabarbarum antiquorum.* The root of this species appears to have been the true rhubarb of the antients. By some it is confounded with the modern rhubarb, though considerably different from that root in appearance, as well as in quality. The rhapontic is of a dusky colour on its surface, and a loose spongy texture; is more adstringent than rhubarb, and less purgative; in this last intention, two or three drachms are required for a dose.

RHE'UM UNDULA'TUM. The systematic name of the Siberian rhubarb. The *Rheum undulatum; foliis subvillosis undulatis petio-*

lis æqualibus, of Linnæus. It possesses similar virtues to those of the palmate species, and is in common use in Russia.

RHE'UMA. (From ῥεω, to flow.) The discharge from the nostrils or lungs arising from cold; hence the following lines of the school of Salernum:

Si fluit ad pectus, dicatur rheuma catarrhus,
Ad fauces branchus, ad nares esto coryza!

RHEUMATI'SMUS. (From ῥευματιζω, to be afflicted with defluxions.) *Dolores rheumatici et arthritici*, of Hoffman. *Myositis*, of Sagar. This is a genus of disease in the Class *Pyrexiæ*, and Order *Phlegmasiæ*, of Cullen; characterized by pyrexia, pains in the joints, increased by the action of the muscles belonging to the joint, and heat of the part. The blood, after venæsection, exhibits an inflammatory crust. Rheumatism is distinguished into *acute* and *chronic*. The acute is preceded by shivering, heat, thirst, and frequent pulse; after which the pain commences, and soon fixes on the joints. The chronic rheumatism is distinguished by pain in the joints, without pyrexia, and is divided into three species; *lumbago*, affecting the loins; *ischias*, or *sciatica*, affecting the hip; and *arthrodynia*, or pains in the joints. The acute rheumatism mostly terminates in one of these species.

Rheumatism may arise at all times of the year, when there are frequent vicissitudes of the weather, from heat to cold, but the spring and autumn are the seasons in which it is most prevalent; and it attacks persons of all ages; but very young people are less subject to it than adults.

Obstructed perspiration, occasioned either by wearing wet clothes, lying in damp linen, or damp rooms, or by being exposed to cool air when the body has been much heated by exercise, is the cause which usually produces rheumatism. Those who are much afflicted with this complaint, are very apt to be sensible of the approach of wet weather, by finding wandering pains about them at that period.

Acute rheumatism usually comes on with lassitude and rigors, succeeded by heat, thirst, anxiety, restlessness, and a hard pulse; soon after which, excruciating pains are felt in different parts of the body, but more particularly in the joints of the shoulder, wrist, knees, and ankles, or perhaps in the hip; and these keep shifting from one joint to another, leaving a redness and swelling in every part they have occupied, as likewise a great tenderness to the touch. Towards evening there is usually an exacerbation, or increase of fever; and during the night, the pains become more severe, and shift from one joint to another.

Early in the course of the disease, some degree of sweating usually occurs; but it is seldom so copious as either to remove the pains or to prove critical. In the beginning, the urine is without any sediment; but as the disease advances in its progress, and the fever admits of considerable remissions, a lateritious sediment is deposited; but this by no means proves critical.

Chronic rheumatism is attended with pains in the head, shoulders, knees, and other large joints, which, at times are confined to one particular part, and at others shift from one joint to another, without occasioning any inflammation or fever; and in this manner the complaint continues often for a considerable time, and at length goes off.

No danger is attendant on chronic rheumatism; but a person having been once attacked with it, is ever afterwards more or less liable to returns of it; and an incurable anchylosis is sometimes formed, in consequence of very frequent relapses. Neither is the acute rheumatism frequently accompanied with much danger; but, in a few instances, the patient has been destroyed by general inflammation, and now and then by a metastasis to some vital part, such as the head and lungs. Acute rheumatism although accompanied with a considerable degree of inflammation in particular parts, has seldom been known to terminate in suppuration; but a serous or gelatinous effusion takes place.

Rheumatism seldom proving fatal, very few opportunities have offered for dissections of the disease. In the few which have occurred, the same appearances have been observed as in inflammatory fever, effusion within the cranium, and now and then affections of some of the viscera.

In the acute rheumatism the general antiphlogistic plan of treatment is to be pursued, so long as the febrile and inflammatory symptoms are severe. It may be sometimes proper to begin by a moderate abstraction of blood, where the patient is young and plethoric; and if the disease attacks any important part, this measure must be more actively pursued; but in general it does not appear necessary. Even the local abstraction of blood is hardly advisable, unless the affection be very much fixed to one part, and the symptoms urgent: and it may be said, that most local applications are rather likely to drive the disease from one part to another, than to afford permanent relief. After freely opening the bowels, the chief object is to endeavour to procure a general and mild diaphoresis by antimonial and mercurial preparations, assisted by opium or other narcotic, which may also alleviate the pain, and occasionally by the warm bath, where the skin is particularly harsh and dry. Digitalis, by moderating the circulation, will sometimes be usefully conjoined with these medicines. As the fever abates, and the strength appears impaired, tonics should be given to promote the convalescence of the patient, and obviate a relapse: and where the inflammation remains fixed in a particular joint, after the pyrexia has ceased, fomentations and other local measures, according to the state of the part, may be employed for its removal. In the *arthrodynia*, or chronic rheumatism, as it is commonly called, the remedies of chief efficacy are stimulant diaphoretics in moderate doses regularly persevered in, assisted by various local means of promoting the circulation through the affected part. Anodynes may be also used with advantage both internally and locally: and attention should be paid to support the strength, and correct any observable deficiency in the several functions.

Rhibe'sia. (From *ribes*, a currant.) See *Ribes nigrum*, *Ribes rubrum*, and *Fruits, summer*.

Rhinæ'us. (*Rhinæus*, sc. *musculus*; from ριν, the nose.) See *Compressor naris*.

Rhinenchy'tes. (From ριν, the nose, and εγχυω, to pour in.) A syringe for the nose.

Rhinopho'nia. (From ριν, the nose, and φωνη, the voice.) A nasal voice.

Rhiza'gra. (From ριζα, the root, and αγρευω, to seize.) An instrument for taking out the roots or stumps of teeth.

RHO'DIA. (From ροδον, a rose; so called because its root smells like the damask rose.) See *Rhodiola*.

Rhodi'ola ro'sea. The radix rhodiæ of some pharmacopœias is the produce of the *Rhodiola rosea*, of Linnæus, called rosewort. When dry, it has a very pleasant smell, resembling that of the damask rose. In this odorous matter the medical virtue of the root resides. Poultices in which this root enters as a chief ingredient are said to allay violent pains of the head.

Rho'dium li'gnum. (From ροδον, a rose; a wood which smells like roses.) Rhodium, or rose-wood. The wood or root of a tree supposed to be the *Genista canariensis*, of Linnæus. It is brought from the Canary islands. An essential oil is obtained from it, which is used principally as a perfume, but possesses cordial and corroborant virtues. It is also an ingredient in the composition of powders for the destruction of rats.

RHODODE'NDRON. (From ῥοδον, a rose, and δενδρον, a tree; so called because its flowers resemble the rose.)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Monogynia*.

2. The pharmacopœial name of the oleander. Rose-bay. See *Rhododendron chrysanthemum*.

Rhodode'ndron chrysa'nthemum. The systematic name of the oleander, rose-bay, or yellow rhododendron. This species of rhododendron, *foliis oblongis impunctis supra scabris venosissimis, corolla rotata irregulari gemma florifera ferrugineo-tomentosa*, has not yet been introduced in Britain; it is a native of Siberia, affecting mountainous situations, and flowering in June and July.

This plant and its medical virtues were first described in 1747, by Gmelin and Haller. Little attention, however, was paid to it, till the year 1779, when it was strongly recommended by Koelpin as an efficacious medicine, not only in rheumatism and gout, but even in venereal cases; and it is now very generally employed in chronic rheumatisms, in various parts of Europe. The leaves, which are the part directed for medicinal use, have a bitterish subadstringent taste. Taken in a large dose, they prove a narcotic poison; and, in moderate doses, they are said to occasion heat, thirst, a degree of delirium, and a peculiar sensation of the parts affected.

As a powerful and active medicine, this shrub, says Dr. Woodville, may probably be found an addition to the materia medica. Dr. Home, who tried it unsuccessfully in some cases of acute rheumatism, says, "It appears to be one of the most powerful sedatives which we have, as, in most of the trials, it made the pulse remarkably slow, and in one patient reduced it to thirty-eight beats. And in other cases, in which the rhododendron has been used at Edinburgh, it has been productive of good effects, and accordingly it is now introduced into the Edinburgh Pharmacopœia. The manner of using this plant by the Siberians, was by putting two drachms of the dried leaves in an earthen pot, with about ten ounces of boiling water, keeping it near a boiling heat for a night; and this they took in the morning, and by repeating it three or four times, generally effected a cure.

Rhodo'meli. (From ροδον, the rose, and μελι, honey.) Honey of roses.

Rhœ'ados pe'tala. Red poppy petals.

RHŒ'AS. (*Rhœas, -ados*, m. From ρεω, to flow.) The wild poppy is sometimes so called. See *Papaver rhœas*.

RHOMBOIDE'US. (From ῥομβος, a geometrical figure, whose sides are equal but not right-angled, and ειδος, resemblance.) *Rhomboideus major* and *minor*. *Rhomboides*, of Douglas, Winslow, and Cowper; and *Cervici dorso scapulaire*, of Dumas. This muscle, which is so named from its shape, is situated immediately under the trapezius. We find it usually, though not always, divided into two portions, which Albinus describes as two distinct muscles. The uppermost of these, or *rhomboideus minor*, arises tendinous from the spinous processes of the three inferior vertebræ of the neck, and from the ligamentum colli; the lowermost, or *rhomboideus major*, arises tendinous from the spinous processes of the back: the former is inserted into the basis of the scapula, opposite to its spine; the latter into all the basis of the scapula, below its spine. Its use is to draw the scapula obliquely upwards, and directly backwards.

Rhopalo'sis. (From ῥοπαλον, a club.) A disorder in which the hair cleaves together, and hangs down in clusters resembling clubs. The plaited hair.

Rhubarb. See *Rheum.*

Rhubarb, monks. See *Rumex patientia.*

Rhubarb, rhapontic. See *Rheum rhaponticum.*

RHUS. (From ῥεω, to flow; so called because it stops fluxes.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Trigynia.* The sumach-tree.

Rhus be'lgica. The Dutch myrtle is sometimes so termed. See *Myrica gale.*

Rhus coria'ria. Sumach. Elm-leaved sumach. This plant, *Rhus coriaria; foliis pinnatis obtusiuscule serratis ovalibus subtus villosis,* of Linnæus, is a small tree, a native of the south of Europe. It is singular that this is the only species of the genus rhus which is perfectly innocent; the others being active poisons. Both the leaves and berries of this plant are used medicinally, as astringents and tonics; the former are the most powerful, and have been long in common use, where they may be easily obtained in various complaints indicating this class of remedies. The berries, which are red, and of a roundish compressed figure, contain a pulpy matter, in which is lodged a brown, hard, oval seed, manifesting a considerable degree of adstringency. The pulp, even when dry, is grateful, and has been discovered to contain an essential salt, similar to that of wood sorrel. An infusion of the dried fruit is not rendered black by a solution of iron; hence it appears to be destitute of adstringency. But its acidity is extremely grateful; therefore, like many other fruits, these berries may be advantageously taken to allay febrile heat, and to correct bilious putrescency.

Rhus radicans. See *Rhus vernix.*

Rhus tiphinum. The systematic name of the Virginian sumach, whose seeds are said to be useful in stopping hæmorrhages.

Rhus toxicode'ndron. Poison oak, or sumach. This plant is a native of North America. The stems, if cut, exude a milky juice, which inflames the skin. The leaves, now inserted in the pharmacopœia, are inodorous, and have a mawkish subacrid taste. Their virtues are extracted more perfectly by water than by alkohol. They prove stimulant and narcotic, when taken internally. Dr. Alderson, of Hull, found them successful in several cases of paralysis. They excite a sense of heat and pricking, and irregular twitches in the affected limbs. They have been sometimes useful, also, in herpetic eruptions. The dose may be from half a grain, gradually increased to four grains, two or three times a day.

Rhus vernix. *Rhus radicans.* The systematic name of a poisonous plant, the efficacy of which Dr. Fresnoi has endeavoured to prove, in the disease called paralysis, and herpetic affections. He, in order that others should not suffer by his experiments, began by taking an infusion of one of the three foliola of which each leaf of this plant consists; and as this dose produced no sensible effect, he increased the number to twelve. His urine and perspiration were increased in quantity, and he had some pains in his belly. He relates seven cases, in which he thinks he can remove all doubt of the efficacy of this infusion, in herpetic affections. From these the following are selected:

"A country woman," says Dr. Fresnoi, "came to me in the month of July, 1780, to consult me about the herpes farinosa, with which her face had been covered for more than a year. She was ordered to take an infusion of this plant; and, in six weeks, was entirely free from the disease."

He likewise relates five cases of paralysis, which were cured by the use of this plant.

The leaves of this plant are to be cut when in the greatest vigour, about the month of June. "Those who cut this plant," says Dr. F. "wear leathern gloves, on account of its poisonous qualities." The same gentleman observes, he saw one case in which inflammation of the eye-lids was produced by the vapour from the plant. Four pounds of the leaves being distilled with thirty-two pounds of water, give it a slight odour, although the plant is entirely free from it. Its taste is pungent, and inflames the mouth. The decoction which remains in the still is brown, and is generally covered with a light brown pellicle. When strained and evaporated, it gives a shining black extract. The leaves inflame and swell the hands and arms of those who take them out of the still, and bring on an itching, which remains for several days. Forty-two pounds of the leaves afford twenty ounces of extract, of a proper consistence for pills.

"A girl, in Flanders," says Dr. Fresnoi, "already subject to fits, laid down some flowers in her bed-room. Next day she told me that she had undergone a great change: that she had had no fits, and slept much better. It occurred to me," says Dr. F. "that the flowers occasioned this change. Next day, the flowers being removed, and the window opened, the convulsions reappeared; on their being again introduced, the fits disappeared; which proved plainly it was the effect of the flowers. The success of the extract in tussis convulsiva exceeded my hopes; forty-two children being cured of this disorder in Valenciennes, during the end of the year 1786. Four grains of extract are to be dissolved in four ounces of syrup, of which one table-spoonful given to the child every third hour, generally abates the cough, and mostly leaves them.

RHY'AS. ('ρυας, a disease of the eye.) A decrease or defect of the lachrymal caruncle. The proximate cause is a native defect; or it may originate from excision, erosion, or acrimony. This disorder is commonly incurable, and it induces an incurable *epiphora*, or a continual weeping.

RHYTIDO'SIS. See *Rutidosis.*

RI'BES. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* The currant-tree.

RI'BES NI'GRUM. Black currant. This indigenous plant, *Ribes; racemis pilosis, floribus oblongis,* of Linnæus, affords larger berries than those of the red, which are said to be peculiarly useful in sore throats, and to possess a diuretic power in a very considerable degree. The leaves of the black currant are extremely fragrant, and have been likewise recommended for their medicinal virtue, which Bergius states to be mundificans, pellens, diuretica. The officinal preparations of the berries are the *syrupus ribis nigri,* and the *succus ribis nigri inspissatus.*

RI'BES RU'BRUM. *Grossularia non spinosa.* The red currant. *Ribes, inerme; racemis glabris pendulis, floribus planiusculis,* of Linnæus. The white currant-tree is merely a variety of the red, the fruit of both is perfectly analogous; therefore, what is said of the one applies to the other. The red currant is abundantly cultivated in gardens, and, from its grateful acidity, is universally acceptable, either as nature presents it, or variously prepared by art, with the addition of sugar. Considered medicinally, it is esteemed to be moderately refrigerant, antiseptic, attenuant, and aperient. It may be used with considerable advantage to allay thirst, in most febrile complaints, to lessen an increased secretion of bile, and to correct a putrid and scorbutic state of the fluids, especially in sanguine temperaments; but, in constitutions of a contrary kind, it is apt to occasion flatulency and indigestion.

RIBS. *Costæ.* The ribs are the long curved bones which are placed in an oblique direction at the sides of the chest. Their number is generally twelve on each side; but, in some subjects, it has been found to be thirteen, and in others, though more rarely, only eleven. They are distinguished into true and false ribs. The seven upper ribs, which are articulated to the sternum, are called *true* ribs; and the five lower ones, which are not immediately attached to that bone, are called *false* ribs. At the posterior extremity of each rib we observe a small head, divided by a middle ridge into two articulating surfaces, covered with cartilage, which are received into two cavities contiguous to each other, and formed in the upper and lower part of each dorsal vertebra, as we have observed in our description of the spine. This articulation, which is secured by a capsular ligament, is a species of ginglymus, and allows only of motion upwards and downwards. The head of each rib is supported by a short neck, and immediately beyond this we find a flattened tubercle, affording an oblong and slightly convex surface, which is articulated with the transverse process of the lowest of the two dorsal vertebræ, with which its head is articulated. At some little distance from this tuberosity, the rib makes a considerable curve, which is usually called its angle. From the tubercle to the angle the ribs are of considerable thickness, and approaching to a cylindrical shape; but, from the angle to their anterior extremity, they become thinner and flatter. To this anterior extremity is fixed a long, broad, and strong cartilage, which, in each of the true ribs, reaches to the sternum, where its articulation is secured by a capsular ligament, and by other ligamentous fibres. The cartilages of the sixth and seventh ribs being longer than the rest, are extended upwards, in order to reach the sternum, the inferior portion of which is about on a level with the fifth rib. The cartilages of these two ribs are usually united into one, so as to leave no space between them. The false ribs are supported in a different manner; their cartilages terminate in an acute point before they reach the sternum, the eighth rib being attached by its cartilage to the lower edge of the cartilage of the seventh, or last of the true ribs; the ninth in the same manner to the eighth; and the tenth to the ninth; the cartilages of each rib being shorter than that of the rib above it. The eleventh and twelfth, which are the two lowermost ribs, are not fixed at their anterior extremities like the other ribs, but hang loose, and are supported only by their ligamentous fibres, and by muscles and other soft parts.

The external surface of each rib is somewhat convex, and its internal surface slightly concave. On the inferior and interior surface of these bones we observe a long fossa, for the lodgment of the intercostal vessels and nerves. This channel, however, does not extend through the whole length of the rib, being observable neither at the posterior extremity, where the vessels have not yet reached the bone, nor at the fore-end, where they are distributed to the parts between the ribs. We seldom see any marks of it in the short ribs, as in the first, second, eleventh, and twelfth.

Thus far we have given a description, which is applicable to the ribs in general; but, as we find them differing from each other in shape, length, situation, and other respects, it will be right to speak of each rib in particular.

The *first* rib, which is the shortest of any, is likewise the most curved. It is broader than the other ribs, and, instead of being placed, as they are, obliquely, and with its edges upwards and downwards, it is situated nearly in a tranverse direction, one of its edges being placed inwards, or nearly so. Of these edges, the inner one is sharp, and the outer one somewhat rounded. Its inner surface is smooth, and its superior surface is sometimes slightly depressed anteriorly by the clavicle. The head of this rib, instead of being angular, is flattened, and slightly convex, being received into a cavity, which is formed wholly in the first vertebra, and not by two vertebræ, as is the case with the other ribs.

The *second* rib is longer than the first, but shorter than the ribs below it. Its angle is placed at a small distance from its tuberosity, and its head is articulated with two vertebræ, like the other ribs. The other ten ribs, the two last only excepted, differ from the general description we have given, chiefly in the difference of their length, which goes on gradually increasing, from the first or uppermost, to the seventh or last of the true ribs, and as gradually diminishing from that to the twelfth. Their obliquity, in respect to the spine, likewise increases as they descend, as does the distance between the head and angle of each rib, from the first rib to the ninth. The two lowest ribs differ from all the rest in the following particulars: — Their heads, like that of the first rib, are rounded, and received into a cavity formed entirely in the body of one vertebra; they have no tubercle for their articulation with the transverse processes, to which they are only loosely fixed by ligaments, and, in this respect, the tenth rib is sometimes found to agree with them: they are much shorter than the rest of the false ribs, and the twelfth is still shorter than the eleventh. The length of the latter, however, is different in different subjects, and is not always found to be the same on both sides. Anteriorly, as we have already observed, their cartilages are short and loose, not being attached to the cartilages of the other ribs; and this seems to be, because the most considerable motions of the trunk are not performed on the lumbar vertebræ alone, but likewise on the lower vertebræ of the back; so that if these two ribs had been confined anteriorly, like the rest, and likewise united to the bodies of two vertebræ, and to the tranverse process, this disposition would have impeded the motion of the two last vertebræ of the back, and consequently would have affected the motion of the trunk in general.

The use of the ribs is to give form to the thorax, and to cover and defend the lungs; also to assist in breathing; for they are joined to the vertebræ by regular hinges, which allow of short motions, and to the sternum by cartilages, which yield to the motion of the ribs, and return again when the muscles cease to act.

Ribwort. The *Plantago lanceolata*, of Linnæus, or narrow-leaved plantain, is sometimes so termed.

Rice. See *Oryza.*

RI'CINUS. (*Quasi* ριν κυνος, a dog's nose; because they stick to the noses of dogs.)

1. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Monadelphia.*

2. The pharmacopœial name of the plant which affords the seed from which the castor-oil is prepared.

Ricinus communis. The systematic name of the castor-oil plant. *Catapntia major. Ricinus vulgaris. Palma christi. Ricinus foliis peltatis subpalmatis serratis,* of Linnæus. This plant appears to be the Κικι, or Κροτων, of Dioscorides, who observes, that the seeds are powerfully cathartic; it is also mentioned by Aëtius, Paulus Ægineta, and Pliny. The ricinus was first cultivated in England, in the time of Turner, and is now annually reared in many gardens in the neighbourhood of London; and in that of Dr. Saunders, at Highbury, the plant grew to a state of great perfection. An oil extracted from the seeds of this plant, and known by the name of oleum ricini, palma christi, or castor oil, is the drug to which the pharmacopœias refer, and which has lately come into frequent use, as a quick but gentle purgative.

The London College directs this oil to be expressed from the seeds in the same way as that of the oil of almonds, and without the assistance of heat, by which the oil would seem to be obtained in the purest state. However, we have some reason to believe that this method is seldom practised, and that the oil usually employed here is imported from the West Indies, where it is commonly prepared in the following manner: — "The seeds being freed from the husks, or pods, which are gathered upon their turning brown, and when beginning to burst open, are first bruised in a mortar, afterwards tied up in a linen bag, and then thrown into a large pot, with a sufficient quantity of water (about eight gallons, to one gallon of the seeds), and boiled till the oil is risen to the surface, when it is carefully skimmed off, strained and kept for use. Thus prepared, the oil is entirely free from acrimony, and will stay upon the stomach when it rejects all other medicines." Mr. Long remarks, that the oil intended for medicinal use, is more frequently cold drawn, or extracted from the bruised seeds by means of a hand-press. But this is thought more acrimonious than that prepared by coction. Dr. Browne is also of this opinion, and prefers the oil prepared by coction to that by expression; he attributes its greater mildness to the action of the fire, observing that the expressed oil, as well the mixed juices of the seeds, are far more active and violent in their operation.

Dr. Cullen observes, that "this oil, when the stomach can be reconciled to it, is one of the most agreeable purgatives we can employ. It has this particular advantage, that it operates sooner after its exhibition than any other purgative I know of, as it commonly operates in two or three hours. It seldom gives any griping, and its operation is generally moderate, producing one, two, or three stools only. It is particularly suited to cases of costiveness, and even to cases of spasmodic colic.

In the West Indies, it is found to be one of the most certain remedies in the dry belly-ache, or colica pictonum. It is seldom found heating or irritating to the rectum; and, therefore is sufficiently well suited to hæmorrhoidal persons.

The only inconvenience attending the use of this medicine is, that as an oil it is nauseous to some persons; and that, when the dose is large, it occasions sickness at the stomach for some time after it is taken. To obviate these inconveniencies, several means have been tried; and it is found that the most effectual means is the addition of a little ardent spirit. In the West Indies, they employ rum; but that I might not withdraw any part of the purgative, I employ the *Tinc. sennæ comp.* This added in the proportion of one to three parts of the oil, and very intimately mixed, by being shaken together in a phial, both makes the oil less nauseous to the taste, and makes it sit more easy on the stomach. The common dose of this oil is a table-spoonful, or half an ounce; but many persons require a double quantity.

Ri'cinus ma'jor. See *Jatropha curcas.*

Ri'cinus vulga'ris. See *Ricinus.*

Rickets. See *Rachitis.*

RI'GOR. A coldness, attended by a shivering, more or less perfect.

RI'MA. A fissure, or opening; as the *rima laryngis, rima vulvæ.*

RI'MA GLO'TTIDIS. The opening of the larynx, through which the air passes in and out of the lungs.

Ri'mula. (Dim. of *rima,* a fissure.) A small fissure.

Rinæ'us. (From ριν, the nose. See *Compressor naris.*

Ring-worm. A species of herpes. See *Herpes.*

Ri'sagon. See *Cassumuniar.*

RI'SUS, SARDO'NICUS. See *Sardonic laugh.*

RIVERIUS, Lazarus, was born at Montpelier in 1589. Being naturally slow in his attainments, he failed in his first examinations for a degree; but this only stimulated him to redoubled exertions, so that in the following spring he accomplished his object at the age of 22. His attachment to study became then very great, and eleven years after that period he was appointed to the professorship of medicine in the university; which office he filled with great honour till his death in 1655. Riverius published some valuable works, especially one, entitled "Praxis Medica;" which appeared at first in a concise form, as a sort of text-book; but finding it very favourably received by the public, he enlarged and improved it considerably; and it added greatly to his reputation, having passed through numerous editions, as well in the original, as translated into French and English.

Rivinus, Augustus Quirinus, was son of a learned physician and critic, Andrew Bachmann, whose name was Latinized into Rivinus, and born at Leipsic in 1652. He graduated at the age of 24, and fifteen years after obtained the professorships of physiology and botany in his native university; he was also associated with many learned bodies; and he filled these appointments with honour to himself till his death, in 1723. Rivinus distinguished himself chiefly as a systematic botanist; but his arrangement was very defective, being founded on the number of the petals, and their being regular, or irregular. Though by no means eminent as a practical anatomist, he is said to have discovered a new salivary duct. As a medical writer, he has the merit of faithful observation and description in his treatise "De Peste Lipsiensi," published in 1680. He wrote also on dyspepsia, on intermittents, and various other subjects. His "Censura Medicamentorum officinalium," ranks very high, on account of the freedom with which he attacked opinions, however generally received, which he believed erroneous; and to the prevalence of this spirit we owe the great simplification, and other improvements, which the Materia Medica exhibits at present.

ROASTING. A chemical process, generally performed in crucibles, by which mineral substances are divided, some of their principles being volatilized, and others changed, so as to prepare them for other operations.

Rob. (*Rob,* dense, Arabian.) An old term for an inspissated juice.

ROBORANTS. *Medicamenta roborantia;* from *roboro,* to strengthen.) Strengthening medicines. See Tonics.

Rocce'lla. See *Lichen roccella.*

Rochelle salt. See *Soda tartarisata.*

Rockambole. The *Allium scorodoprasum,* of Linnæus. The root is used for pickles and high-seasoned dishes.

Rock-oil. See *Petroleum.*

Rock-samphire. See *Crithmum maritimum.*

Rocket, garden. See *Brassica eruca.*

Rocket, Roman. See *Brassica eruca.*

Rocket, wild. See *Brassica erucastrum.*

Rore'lla. See *Drosera.*

Ros calabri'nus. The officinal manna is sometimes so termed.

Ros so'lis. (*Ros,* dew.) See *Drosea rotundifolia.*

RO'SA. 1. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Polygynia.* The rose.

2. A name sometimes given to the erysipelas, because it begins with a redness like that of a rose.

Ro'sa a'lba. The white rose. The flowers of this species possess similar but inferior virtues to those of the damask. They are directed in some officinal preparations.

Ro'sa cani'na. *Rosa sylvestris. Cynorrhodon. Cynosbatos.* The dog-rose, or wild brier, or hip tree. *Rosa; germinibus ovatis pedunculisque glabris, caule petiolisque aculeatis,* of Linnæus. The fruit of this tree, called heps, or hips, has a sourish taste, and obtains a place in the London pharmacopœia, in the form of conserve. It is seldom employed but to give form to more active remedies, in pills, boluses, linctuses, &c.

Ro'sa centifo'lia. The pharmacopœial and systematic name of the damask rose. *Rosa damascena. Rosa pallida.* The damask rose. The pharmacopœias direct a syrup to be prepared from the petals of this rose. *Rosa; germinibus ovatis pedunculisque hispidis, caule hispido aculeato, petiolis inermibus,* of Linnæus; which is found to be a pleasant and useful laxative for children, or to obviate costiveness in adults. Most of the roses, though much cultivated in our gardens, are far from being distinctly characterised. Those denominated varieties are extremely numerous, and often permanently uniform; and the specific differences, as hitherto pointed out, are in many respects so inadequate to the purpose of satisfactory discrimination, that it becomes a difficult matter to distinguish which are species and which are varieties only. The damask rose seems to be another species, widely different from the centifolia, as appears from the description given of it by Du Roi and Miller.

The petals are directed for medicinal use; they are of a pale red colour, and of a very fragrant odour, which, to most people, is extremely agreeable; and therefore this and most of the other roses are much used as nosegays. We may remark, however, that, in some instances, they have, under certain circumstances, produced alarming symptoms. The petals "impart their odorous matter to watery liquors, both by infusion and distillation. Six pound of fresh roses impregnate, by distillation, a gallon, or more, of water, strongly with their fine flavour. On distilling large quantities, there separates from the watery fluid a small portion of a fragrant butyraceous oil, which liquefies by heat, and appears yellow, but concretes in the cold into a white mass. An hundred pounds of the flowers, according to the experiments of Tachenius and Hoffman, afforded scarcely half an ounce of oil." The smell of the oil exactly resembles that of roses, and is therefore much used as a perfume. It possesses very little pungency, and has been highly recommended for its cordial and analeptic qualities. These flowers also contain a bitterish substance, which is extracted by water along with the odorous principle, and remains entire in the decoction after the latter has been separated by distillation, or evaporation.

This fixed sapid matter of the petals manifests a purgative quality; and it is on this account that the flowers are received in the Materia Medica.

Ro'sa damasce'na. See *Rosa centifolia.*

Ro'sa ga'llica. The pharmacopœial and systematic name of the red rose. *Rosa rubra.* The flowers of this species, *Rosa; germinibus ovatis pedunculisque hispidis, caule petiolisque hispido aculeatis,* of Linnæus, are valued for their adstringent qualities, which are most considerable before the petals expand; and therefore in this state they are chosen for medicinal use, and ordered by the pharmacopœias in different preparations, as those of a conserve, or confection, a honey, an infusion, and a syrup. The infusion of roses is a grateful cooling subadstringent, and useful in hæmoptysis, and other hæmorrhagic complaints: its efficacy, however, depends chiefly on the sulphuric acid added.

Ro'sa pa'llida. See *Rosa centifolia.*

Ro'sa ru'bra. See *Rosa gallica.*

Ro'sa sylve'stris. The dog-rose, or *Rosa canina,* of Linnæus.

Rosa'cea. The term *gutta rosacea* is applied to little rosy-coloured spots upon the face and nose.

Rose. See *Rosa.*

Rose, damask. See *Rosa centifolia.*

Rose, dog. See *Rosa canina.*

Rosea radix. See *Rhodiola.*

Rose, red. See *Rosa gallica.*

Rose root. See *Rhodiola.*

Rose, white. See *Rosa alba.*

Rosebay willow herb. This is the *Epilobium angustifolium,* of Linnæus, common in our woods, in moist situations. The young shoots are said to be little inferior to asparagus, when boiled.

Rosemary. See *Rosmarinus.*

Rosewood. See *Rhodium lignum.*

Rosewort. See *Rhodiola.*

Rosin. See *Resina.*

ROSMARI'NUS. (*Quasi rosa, σμυρνα,* because it smells like myrrh.) 1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.*

2. The pharmacopæial name of the common rosemary.

Rosmari'nus horte'nsis. See *Rosmarinus.*

Rosmari'nus officina'lis. The systematic name of the common rosemary. *Rosmarinus hortensis. Libanotis coronaria. Dendrolibanus. Rosmarinus officinalis,* of Linnæus. The leaves and tops of this plant have a fragrant aromatic smell, and a bitterish pungent taste. Rosemary is reckoned one of the most powerful of those plants which stimulate and corroborate the nervous system; it has therefore been recommended in various affections supposed to proceed from debility, or defective excitement of the brain and nerves, as in certain head-aches, deafness, giddiness, and in some hysterical and dyspeptic symptoms. The officinal preparations of rosemary are, an essential oil from their leaves, or from the herb in flower, a conserve of the flowers, and a spirit formerly called Hungary water, from the flowery tops. The tops are also used in the compound spirit of lavender, and soap liniment.

Rosmari'nus sylve'stris. See *Ledum palustre.*

Ro'strum. (From *rodo,* to gnaw; because birds use it to tear their food with.) A beak. The piece of flesh which hangs between the division of the hare-lip is called rostrum leporinum.

Rotang cane. See *Calamus.*

Rota'tor. (From *roto,* to turn.) A muscle whose office is to wheel about the thigh.

RO'TULA. (Dim. of *rota,* a wheel; so called from its shape.) See *Patella.*

Round-leaved sorrel. See *Rumex scutatus.*

ROUND LIGAMENTS. *Ligamenta rotunda.* A bundle of vessels and fibres contained in a duplicature of the peritonæum, that proceed from the sides of the uterus, through the abdominal ring, and disappear in the pudenda.

Rube'do. (From *ruber,* red.) A diffused, but not spotted, redness in any part of the skin; such as that which arises from blushing.

RUBEFACIENTS. (*Rubefacientia:* from *rubefacio,* to make red.) Those substances which, when applied a certain time to the skin, induce a redness without blistering.

RUBE'OLA. (From *ruber,* red; or from *rubeo,* to become red.) *Morbilli.* The measles. A genus of disease in the Class *Pyrexiæ,* and Order *Exanthemata,* of Cullen; known by synocha, hoarseness, dry cough, sneezing, drowsiness; about the fourth day, eruption of small red points, discernible by the touch, which after three days end in mealy desquamation. The blood, after venæsection, exhibits an inflammatory crust. In addition to the symptoms already related, it is remarkable, that the eyes and eyelids always show the presence of this disease, being somewhat inflamed and suffused with tears. The synocha continues during the whole progress of the disease. In systems of nosology, several varieties of measles are mentioned, but they may all be comprehended under two heads; the one attended with more or less of the symptoms of general inflammation; the other accompanied by a putrid diathesis.

The measles may prevail at all seasons of the year as an epidemic, but the middle of winter is the time they are usually most prevalent; and they attack persons of all ages, but children are most liable to them. They prove most unfavourable to such as are of a plethoric or scrophulous habit. Like the small-pox, they never affect persons but once in their life; their contagion appears to be of a specific nature. The eruption is usually preceded by a general uneasiness, chilliness, and shivering, pain in the head, in grown persons; but in children, a heaviness and soreness in the throat; sickness, and vomiting, with other affections, such as happen in most fevers; but the chief characteristic symptoms are, a heaviness about the eyes, with swelling, inflammation, and a defluxion of sharp tears, and great acuteness of sensation, so that they cannot bear the light without pain, together with a discharge of serous humour from the nostrils, which produces sneezing. The heat, and other febrile symptoms, increase very rapidly; to which succeeds a frequent and dry cough, a stuffing, great oppression, and oftentimes retching to vomit, with violent pains in the loins, and sometimes a looseness; at other times there is great sweating, the tongue foul and white, the thirst very great, and, in general, the fever runs much higher than in the milder sort of the regular small-pox. The eruptions appear about the fourth or fifth day, and sometimes about the end of the third. On the third or fourth day from their first appearance, the redness diminishes, the spots, or very small papulæ, dry up, the cuticle peels off, and is replaced by a new one. The symptoms do not go off on the eruption, as in the small-pox, except the vomiting; the cough and head-ache continue, with the weakness and defluxion on the eyes, and a considerable degree of fever.

On the ninth or eleventh day, no trace of redness is to be found, but the skin assumes its wonted appearance; yet, without there have been some considerable evacuations either by the skin, or by vomiting, the patient will hardly recover strength, but the cough will continue, the fever return with new violence, and bring on great distress and danger.

In the more alarming cases, spasms of the limbs, subsultus tendinum, delirium, or what more frequently happens, coma supervene. This last symptom so frequently attends the eruptive fever of measles, that by some practitioners it is regarded as one of its diagnostics.

In measles, as in other febrile diseases, the symptoms generally suffer some remission towards the morning, returning however in the evening with increased severity.

The measles, even when violent, are not usually attended with a putrid tendency; but it sometimes happens, that such a disposition prevails both in the course of the disease and at its termination.

In such cases petechiæ are to be observed interspersed among the eruptions, and these last become livid, or assume almost a black colour. Hæmorrhages break out from different parts of the body, the pulse becomes frequent, feeble, and perhaps irregular, universal debility ensues, and the patient is destroyed.

In those cases where there is much fever, with great difficulty of breathing, and other symptoms of pneumonic inflammation, or where there is great debility with a tendency to putrescency, there will always be considerable danger; but the consequences attendant on the measles are in general more to be dreaded than the immediate disease; for although a person may get through it, and appear for a time to be recovered, still hectic symptoms and pulmonary consumption shall afterwards arise, and destroy him, or an ophthalmia shall ensue.

Measles, as well as small-pox, not unfrequently call into action a disposition to scrophula, where such happens to exist in the habit.

Another bad consequence of the measles is, that the bowels are often left by them in a very weak state; a chronic diarrhœa remaining which has sometimes proved fatal. Dropsy has also been known as a consequence of measles.

The morbid appearances to be observed on dissections of those who die of measles are pretty much confined to the lungs and intestines: the former of which always show strong marks of inflammation, and sometimes a tendency to sphacelus.

Where the patient dies under the eruption, the trachea and larger branches of the bronchia, as in the small-pox, are often covered with it, which Dr. Thomas observes may account for the increase of the cough, after the appearance of the eruption.

In the treatment of this disorder, as it usually appears, the object is to moderate the accompanying synocha fever, and attend to the state of certain organs, particularly the lungs and the bowels. When there are no urgent local symptoms, it will be commonly sufficient to pursue the general antiphlogistic plan, (avoiding however too free or sudden exposure to cold,) keeping the bowels open, and encouraging diaphoresis by mild antimonials, &c. Sometimes, however, in plethoric habits, especially where the lungs are weak, it will be proper to begin by a moderate abstraction of blood. Where the eruption has been imprudently checked, much distress usually follows, and it will be advisable to endeavour to bring it out again by the warm bath, with other means of increasing the action of the cutaneous vessels. Should an inflammatory determination to the lungs occur, more active evacuations must be practised, as explained under the head of *Pneumonia.* The cough may be palliated by opium, joined with expectorants, demulcents, &c.: and an occasional emetic will be proper, when there is much wheezing. Where diarrhœa takes place, it is better not to attempt to suppress it at once; but if troublesome, moderate it by small doses of opium, assisted perhaps by astringents. At the decline of the disorder, much attention is often required to prevent phthisis pulmonalis supervening. Should the disorder ever put on a putrid character, the general plan pointed out under *typhus,* must be pursued.

RU′BIA. (From *ruber,* red; so called from its red roots.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.*

2. The pharmacopœial name of the madder plant.

Ru′bia tincto′rum. The systematic name of the madder plant. *Erythrodanum. Rubia major. Radix rubra.* Dyer's madder. *Rubia tinctorum, foliis annuis, caule aculeato,* of Linnæus. The roots of this plant have a bitterish, somewhat austere taste, and a slight smell, not of the agreeable kind. It was formerly considered as a deobstruent, detergent, and diuretic, but it is now very seldom used.

Rubi′go cu′pri. See *Verdigris.*

Rubi′go fe′rri. (*Rubigo, a colore rubro,* from its reddish colour.) Rust of iron. See *Ferri subcarbonas.*

Rubi′nus. (From *ruber,* red, so named from its colour.) A carbuncle.

RU′BUS. (From *ruber,* red, so called from its red fruit.) The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Polygynia.*

Ru′bus a′rcticus. The systematic name of the shrubby strawberry. The *Baccæ Norlandicæ.* *Rubus, foliis alternatis, caule inermi unifloro.* They are recommended by Linnæus as possessing antiseptic, refrigerant, and antiscorbutic qualities.

Ru′bus cæ′sius. The systematic name of the dewberry plant, whose fruit resembles the blackberry in appearance and qualities.

Ru′bus chamæ′morus. The systematic name of the cloudberry-tree. *Chamæmorus. Chamærubus foliis ribis Anglicæ. Rubus palustris humilis. Vaccinium Lancastrense. Rubus alpinus humilis Anglicus.* Cloudberries, and knot berries. The ripe fruit of this plant, *Rubus chamæmorus, foliis* *simplicibus lobatis, caule interno unifloro,* of Linnæus, is prepared into a jam; and is recommended to allay thirst, &c. in fevers, phthisical diseases, hæmoptysis, &c. As an antiscorbutic, it is said to excel the scurvy-grass and other vegetables of that tribe in common use.

Ru′bus frutico′sus. The systematic name of the common bramble, which affords blackberries. The berries are eaten in abundance by children, and are wholesome and gently aperient. Too large quantities, however, when the stomach is weak, produce vomiting and great distension of the belly, from flatus. See *Fruits, summer.*

Ru′bus idæ′us. *Batinon. Moron.* The systematic name of the raspberry. *Rubus idæus, foliis quinato-pinnatis ternatisque, caule aculeato, petiolis canaliculatis,* of Linnæus. The fruit of this plant has a pleasant sweet taste, accompanied with a peculiar grateful flavour, on account of which it is chiefly valued. Its virtues consist in allaying heat and thirst, and promoting the natural excretions. A grateful syrup prepared from the juice is directed for officinal use.

RU′CTUS. An eructation.

Rue. See *Ruta.*

Rue, goats. See *Galega.*

Ru′fi pi′lulæ. Rufus's pills. A compound very similar to the aloetic pills with myrrh.

RUFUS, the Ephesian, a physician and anatomist of considerable eminence in the reign of Trajan, esteemed by Galen one of the most able of his predecessors. He traced the origin of the nerves in the brain by dissecting brutes, and considered some of them as contributing to motion, others to sensation. He even observed the capsule of the crystalline lens in the eye. He considered the heart as the seat of life, and of the animal heat, and as the origin of the pulse, which he ascribed to the *spirit* of its left ventricle and of the arteries. There is a very respectable treatise by him on the Diseases of the Urinary Organs, and the Method of curing them. He also wrote a good work on Purgative Medicines; and a little treatise on the Names given by the Greeks to the different Parts of the Body. Galen affirms also, that Rufus was the author of an Essay on the Materia Medica, in verse; and Suidas mentions others on the *Atra bilis,* &c. but these are all lost.

Rum. A spirituous liquor, well known, the produce of the sugar-cane.

RU′MEX. The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Trigynia.* The dock.

Ru′mex aceto′sa. The systematic name of the common sorrel. *Acetosa. Acetosa vulgaris. Acetosa pratensis. Acetosa arvensis.* Sorrel; sour-dock. *Rumex, foliis oblongis sagittatis, floribus diœciis,* of Linnæus. The leaves of this plant are sour, but not the root, which is bitter. It grows in the meadows and common fields.

Ru′mex acu′tus. The systematic name of the sharp-pointed wild-dock. *Oxylapathum. Lapathum. Floribus hermaphroditis; valvulis dentatis graniferis, foliis cordato oblongis acuminatis,* of Linnæus. The decoction of the root of this plant is used in Germany to cure the itch; and it appears to have been used in the time of Dioscorides, in the cure of leprous and impetiginous affections, both alone and boiled with vinegar.

Ru′mex alpi′nus. The systematic name of the plant which affords the monks' rhubarb. See *Rumex patientia.*

Ru′mex aqua′ticus. The water-dock. See *Rumex hydrolapathum.*

Ru′mex cri′spus. The systematic name of the crisp-leaved dock.

Ru′mex hydrolapa′thum. The systematic name of the water-dock. *Hydrolapathum. Rumex aquaticus. Herba Britannica. Lapathum aquaticum.* The water-dock. *Rumex, floribus hermaphroditis, valvulis integris graniferis, foliis lanceolatis,* of Linnæus. The leaves of this plant manifest considerable acidity, and are said to possess a laxative quality. The root is strongly adstringent, and has been much employed, both externally and internally, for the cure of some diseases of the skin, as scurvy, lepra, lichen, &c. The root powdered is said to be an excellent dentrifice.

Ru′mex patie′ntia. The systematic name of the garden patience. *Rhabarbarum monachorum. Hippolapathum. Patientia.* Monks' rhubarb. This root, which is supposed to possess the virtues of rhubarb, but in an inferior degree, is obtained from the *Rumex patientia,* of Linnæus, and, according to Professor Murray, from the *Rumex alpinus,* of Linnæus. It is obviously more adstringent than rhubarb, but comes very far short of its purgative virtue.

Ru′mex sangui′neus. The systematic name of the bloody dock, the root of which has an austere and adstringent taste, and is sometimes given by the vulgar in the cure of dysentery.

Ru′mex scuta′tus. The systematic name of the French sorrel, sometimes called *acetosa rotundifolia,* in the shops. *Acetosa Romana. Acetosa rotundifolia hortensis.* Roman, or garden-sorrel. *Rumex; foliis cordato-hastatis, ramis divergentibus, floribus hermaphroditis,* of Linnæus. It is common in our gardens and in many places is known by the culinary name of Green-sauce. Its virtues are similar to those of common sorrel. See *Rumex acetosa.*

Rupelle′nsis sal. (From *Rupella Rochelle,* where it was first made by M. Seignette.) A term applied to Rochelle salt, Now called soda tartarizata.

Ruptu′ra. See *Hernia.*

Rupture. See *Hernia.*

Rupture-wort. See *Herniaria.*

RU'SCUS. (*A russo colore,* from the carnation colour of its berries.)

1. The name of a genus of plants in the Linnæan system. Class, *Dioecia.* Order, *Syngenesia.*

2. The pharmacopœial name of the butchers' broom, or knee-holly.

Ru'scus aculea'tus. The systematic name of butchers' broom. *Bruscus. Oxymyrrhine. Oxymyrsine. Myrtacantha. Myacantha. Scopa regia.* Wild myrtle. A small evergreen shrub, the *ruscus aculeatus, foliis supra floriferis nudis,* of Linnæus. It grows in woods and thickets in this country. The root, which is somewhat thick, knotty, and furnished with long fibres, externally brown, internally white, and of a bitterish taste, has been recommended as an aperient and diuretic in dropsies, urinary obstructions and nephritic cases. It is seldom used in this country. See *Ruscus.*

Ru'scus hypoglo'ssum. The systematic name of the uvularia. This plant was formerly used against relaxation of the uvula, but is now laid aside for more adstringent remedies.

Rush-nut. The root of the *Cyperus esculentus,* of Linnæus, a native of Italy, where it is collected and eaten, being more delicately and pleasantly tasted than our chesnuts.

Rush, sweet. See *Andropogon schænanthus.*

RUSSELL, Alexander, was a native of Edinburgh, where he received his medical education, and afterwards became physician to the English factory at Aleppo, where he resided several years. He soon obtained a proud pre-eminence above all the practitioners there, and was consulted by persons of every description. The pacha particularly distinguished him by his friendship, and sought his advice on every act of importance. In 1755, he published his "Natural History of Aleppo," a valuable and interesting work, containing especially some important observations relative to the Plague. On his return to England four years after, he settled in London, and was elected physician to St. Thomas's hospital, which office he retained till his death in 1770. He presented several valuable communications to the Royal Society, as also to the Medical Society.

RUSSELL, Patrick, was brother of the preceding, and his successor as physician to the English factory at Aleppo. He published a copious treatise on the Plague, having had ample opportunities of treating that disease during 1760, and the two following years. In this work he has fully discussed the important subjects of Quarantine, Lazarettoes, and the Police to be adopted in times of Pestilence. He likewise gave to the public a new edition of his brother's work on a very enlarged scale.

Russia ashes. The impure potash, as imported from *Russia.*

RU'TA. (From ρυω, to preserve, because it preserves health.)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

2. The pharmacopœial name of the common rue.

Ru'ta grave'olens. The systematic name of the common rue. *Ruta; foliis decompositis, floribus lateralibus quadrifidis,* of Linnæus. Rue has a strong ungrateful smell, and a bitter, hot, penetrating taste; the leaves are so acrid, that by much handling they have been known to irritate and inflame the skin; and the plant, in its natural or uncultivated state, is said to possess these sensible qualities still more powerfully. The imaginary quality of the rue, in resisting and expelling contagion, is now disregarded. It is doubtless a powerful stimulant, and is considered, like other medicines of the fetid kind, as possessing attenuating, deobstruent, and antispasmodic powers. In the former London Pharmacopœia it was directed in the form of an extract; and was also an ingredient in the *pulvis e myrrha comp.* but these are now omitted. The dose of the leaves is from fifteen grains to two scruples.

Ru'ta mura'ria. The plant to which this name is given in the Pharmacopœias, is the *Asplenium ruta muraria,* of Linnæus; which see.

RUTIDO'SIS. A corrugation and subsiding of the cornea of the eye. The species are, 1. *Rutidosis,* from a wound or puncture penetrating the cornea. 2. *Rutidosis,* from a fistula penetrating the cornea. 3. *Rutidosis,* from a deficiency of the aqueous humour, which happens from old age, fevers, great and continued evacuations, and in extreme dryness of the air. 4. *Rutidosis,* of dead persons, when the aqueous humour exhales through the cornea, and no fresh humour is secreted; so that the cornea becomes obscure and collapsed: this is a most certain sign of death.

Ru'tula. (From *ruta,* rue.) A small species of rue.

RUYSCH, Frederick, was born at the Hague in 1638. After going through the preliminary studies with great zeal, he graduated at Leyden in 1664, and then settled in his native city. In the following year he published his treatise on the lacteal and lymphatic vessels; in consequence of which he was invited to the chair of anatomy at Amsterdam. From that period his attention was chiefly devoted to anatomical researches, both human and comparative; and he contributed materially to the improvement of the art of injecting, for the purpose of demonstrating minute structure, and preserving the natural appearance of parts. His museum became ultimately the most magnificent that any private individual had ever accumulated; and being at length purchased by the czar Peter for thirty thousand florins, he immediately set about a new collection. He appears not to have paid sufficient attention to inform himself of the writings of others, whence he sometimes arrogated to himself what was really before known, which led him into several controversies; but his indefatigable researches in anatomy were certainly rewarded with many discoveries. In 1685 he was appointed professor of physic, and received subsequently several marks of distinction, as well in his own as from foreign countries. In 1728 he had the misfortune to break his thigh by a fall in his chamber, and the remainder of his life for about three years, was chiefly occupied in proceeding with his new museum, in which his youngest daughter assisted him. Besides his controversial tracts, he published several other works, chiefly anatomical; "Observationum Anat. Chirurg. Centuria;" twelve essays under the title of "Thesaurus Anatomicus," at different periods, the last containing Remarks on the Anatomy of Vegetables; a "Thesaurus Animalium," with plates; three decades of "Adversaria Anat. Chirurg. Medica," &c.

RUYSCHIA'NA TU'NICA. The internal surface of the choroid membrane of the human eye, which this celebrated anatomist imagined was a distinct lamina from the external surface.

Ry'as. See *Rhœas.*

Rye, common. A very common bread-corn among the northern parts of Europe; it is less nourishing than wheat, but a sufficiently nutritive and wholesome grain. It is more than any other grain strongly disposed to acescency; hence it is liable to ferment in the stomach, and to produce purging, which people on the first using it commonly experience.

S.

S. A. The contraction of *secundum artem.*

S, *or* ss. Immediately following any quantity, imports *semis*, or half.

Sabadi'lla. See *Cevadilla.*

SABI'NA. Named from the Sabines, whose priests used it in their religious ceremonies. See *Juniperus Sabina.*

SABULOUS. (*Sabulosus*, Gritty, sandy.) A term often applied to the calcareous matter in urine.

SABU'RRA. Dirt, sordes, filth. Foulness of the stomach, of which authors mention several kinds, as the acid, the bitter, the empyreumatic, the insipid, the putrid.

Saccated dropsy. Ascites saccatus. See *Ascites.*

SA'CCHARI A'CIDUM. Acid of sugar. If one part of sugar be distilled with three parts of nitric acid, till nitrous gas ceases to be developed, and then redistilled with three parts of the same acid, a white crystallized salt is found in the liquid residue, which is the acid of sugar.

SA'CCHARUM. (Σακχαρον, from *sacchar*, Arab.) The Arabians call it *suchar*, *succhar*, *sutter*, *zuchar*, *zucaro*, and *zozar*; the Greeks call it *sackohar*, *salcharion*, and *spodium.*

1. The name of a genus of plants in the Linnæan system. Class *Triandria*, Order *Digynia.* The sugar cane.

2. The sweet substance called sugar, obtained from the *Saccharum officinarum*, of Linnæus, the *Arundo saccharifera*, of Sloane.

Sugar is prepared in the West and East Indies from the expressed juice of this plant boiled with the addition of quick lime or common vegetable alkali. It may be extracted also from a number of plants, as the maple, birch, wheat, corn, beet-root, skirret, parsnips, and dried grapes, &c. by digesting in alcohol. The alcohol dissolves the sugar, and leaves the extractive matter untouched, which falls to the bottom. It may be taken into the stomach in very large quantities, without producing any bad consequences, although proofs are not wanting of its mischievous effects, by relaxing the stomach, and thus inducing disease. It is much used in pharmacy, as it forms the basis of syrups, lozenges, and other preparations. It is very useful as a medicine, although it cannot be considered to possess much power, to favour the solution or suspension of resins, oils, &c. in water, and is given as a purgative for infants. Dr. Cullen classes it with the attenuantia, and Bergius states it to be saponacea, edulcorans, relaxans, pectoralis, vulneraria, antiseptica, nutriens. In catarrhal affections both sugar and honey are frequently employed: it has also been advantageously used in calculous complaints; and from its known power in preserving animal and vegetable substances from putrefaction, it has been given with a view to its antiseptic effects. Sugar-candy, by dissolving slowly in the mouth, is well suited to relieve tickling coughs and hoarseness. Sugar is every where the basis of that which is called sweetness. Its presence is previously necessary in order to the taking place of vinous fermentation. Its extraction from plants, which afford it in the greatest abundance, and its refinement for the common uses of life, in a pure and separate state, are among the most important of the chemical manufactures.

The following is the mode of its manufacture in the West Indies: The plants are cultivated in rows, on fields enriched by such manures as can most easily be procured, and tilled with the plough. They are annually cut. The cuttings are carried to the mill. They are cut into short pieces, and arranged in small bundles. The mill is wrought by water, wind, or cattle. The parts which act on the canes are upright cylinders. Between these the canes are inserted, compressed till all their juice is obtained from them, and themselves, sometimes, even reduced to powder. One of these mills, of the best construction, bruises canes to such a quantity as to afford, in one day, 10,000 gallons of juice, when wrought with only ten mules. The expressed juice is received into a leaden bed. It is thence conveyed into a vessel called the receiver. The juice is found to consist of eight parts of pure water, one part of sugar, one part of oil and gummy mucilage. From the greener parts of the canes there is apt to be at times derived an acid juice, which tends to bring the whole unseasonably into a state of acid fermentation. Fragments of the ligneous part of the cane, some portions of mud or dirt which unavoidably remain on the canes, and a blackish substance called the crust, which coated the canes at the joints, are also apt to enter into contaminating mixture with the juice. From the receiver the juice is conducted along a wooden gutter lined with lead, to the boiling-house. In the boiling-house it is received into copper pans or caldrons, which have the name of clarifiers. Of these clarifiers the number and the capacity must be in proportion to the quantity of canes, and the extent of the sugar plantation on which the work is carried on. Each clarifier has a syphon or cock, by which the liquor is to be drawn off. Each hangs over a separate fire; and this fire must be so confined, that by the drawing of an iron slider fitted to the chimney, the fire may be at any time put out. In the progress of the operations, the stream of juice from the receiver fills the clarifiers with fresh liquor. Lime in powder is added in order to take up the oxalic acid, and the carbonaceous matters which are mingled with the juice. The lime also in the new salts, into the composition of which it now enters, adds itself to the sugar, as a part of that which is to be obtained from the process. The lime is to be put in in the proportion of somewhat less than a pint of lime to every hundred gallons of liquor. When it is in too great quantities, however, it is apt to destroy a part of the pure saccharine matter. Some persons employ alkaline ashes, as preferable to lime, for the purpose of extracting the extraneous matter; but it is highly probable that lime, judiciously used, might answer better than any other substance whatsoever. The liquor is now to be heated almost to ebullition. The heat dissolves the mechanical union, and thus favours the chemical changes in its different parts. When the proper heat appears from a rising scum on the surface of the liquor, to have been produced, the fire is then extinguished by the application of the damper. In this state of the liquor, the greater part of the impurities, being different in specific gravity from the pure saccharine solution, and being also of such a nature as to yield more readily to the chemical action of heat, are brought up to the surface in a scum. After this scum has been sufficiently formed on the cooling liquor, this liquor is carefully drawn off, either by a syphon, which raises a pure stream through the scum, or by a cock drawing the liquor at the bottom from under the scum. The scum in either case sinks down unbroken, as the liquor flows; and is now, by cooling, of such tenacity, as not to tend to any intermixture with the liquor. The liquor drawn, after this purification from the boiler, is received into a gutter or channel, by which it is conveyed to the grand copper, or evaporating boiler. If made from good canes, and properly clarified, it will now appear almost transparent. In this copper the liquor is heated to actual ebullition. The scum raised to the surface by the boiling is skimmed off as it rises. The ebullition is continued till there be a considerable diminution in the quantity of the liquor. The liquor now appears nearly of the colour of Madeira wine. It is at last transferred into a second and smaller copper. An addition of lime-water is here made, both to dilute the thickening liquor, to detach the superabundant acid, and to favour the formation of the sugar. If the liquor be now in its proper state, the scum rises in large bubbles, with very little discoloration. The skimming and the evaporation together produce a considerable diminution in the quantity of the liquor. It is then transferred into another smaller boiler. In this last boiler, the evaporation is renewed, and continued till the liquor is brought to that degree of thickness at which it appears fit to be finally cooled. In the cooler, (a shallow wooden vessel of considerable length and wideness, commonly of such a size as to contain a hogshead of sugar,) the sugar, as it cools, granulates, or runs into an imperfect crystallization, by which it is separated from the melasses, a mixed saccharine matter too impure to be capable even of this imperfect crystallization. To determine whether the liquor be fit to be taken from the last boiler to be finally cooled, it is necessary to take out a portion from the boiler, and try separately, whether it does not separate into granulated sugar and melasses. From the cooler, the sugar is removed to the curing-house. This is a spacious, airy building. It is provided with a capacious cistern for the reception of melasses, and over the cistern is erected a frame of strong joist-work, unfilled and uncovered. Empty hogsheads open at the head, bored at the bottom with a few holes, and having a stalk of plantain leaf thrust through each of the holes, while it rises at the same time through the inside of the hogshead, are disposed upon the frames. The mass of the saccharine matter from the coolers is put into these hogsheads. The melasses drip into the cistern through the spongy plantain stalks in the holes. Within the space of three weeks the melasses are sufficiently drained off, and the sugar remains dry. By this process it is at last brought into the state of what is called muscovado or raw sugar. This is the general process in the British West Indies. In this state our West India sugar is imported into Britain. The formation of loaves of white sugar is a subsequent process. In the French West India isles it has long been customary to perform the last part of this train of processes in a manner somewhat different, and which affords the sugar in a state of greater purity. This preparation, taking the sugar from the cooler, then puts it, not into hogsheads with holes in the bottom as above, but into conical pots, each of which has at its bottom a hole half an inch in diameter, that is, in the commencement of the process, stopped with a plug. After remaining some time in the pot, the sugar becomes perfectly cool and fixed. The plug is then removed out of the hole; the pot is placed over a large jar, and the melasses are suffered to drip away from it. After as much of the melasses as will easily run off has been thus drained away, the surface of the sugar in the jar is covered with a stratum of fine clay, and water is poured upon the clay. The water oozing gently through the pores of the clay, pervades the whole mass of sugar, re-dissolves the melasses, still remaining in it, with some parts of the sugar itself, and carrying these off by the holes in the bottom of the pot, renders that which resists the solution much purer than the muscovado sugar made in the English way. The sugar prepared in this manner is called clayed sugar. It is sold for a higher price in the European markets than the muscovado sugar; but there is a loss of sugar in the process by claying, which deters the British planters from adopting this practice so generally as do the French.

The raw sugars are still contaminated and debased by a mixture of acid, carbonaceous matter, oil, and colouring resin. To free them from these is the business of the European sugar bakers. A new solution; clarification with alkaline substances fitted to attract away the oil, acid, and other contaminating matters; slow evaporation; and a final cooling in suitable moulds; are the processes which at last produce loaves of white sugar.

The melasses being nothing else but a very impure refuse of the sugar from which they drip, are susceptible of being employed in a new ebullition, by which a second quantity of sugar may be obtained from them. The remainder of the melasses is employed to yield rum by distillation. In rum, alkohol is mixed with oil, water, oxalic acid, and a mixture of empyreumatic matter. The French prepare, from the mixture of melasses with water, a species of wine of good quality. In its preparation, the solution is brought into fermentation, then passed through strainers to purify it, then put in casks; after clearing itself in these, transferred into others, in which it is to be preserved for use. The ratio of these processes is extremely beautiful; they are all directed to purify the sugar from contaminating mixtures, and to reduce it into that state of dryness or crystallization, in which it is susceptible of being the most conveniently preserved for agreeable use. The heat in general acts both mechanically to effect a sufficient dissolution of the aggregation of the parts of the cane juice, and chemically to produce in it new combinations into which caloric must enter as an ingredient. The first gentle heat is intended chiefly to operate with the mechanical influence, raising to the surface impurities which are more easily removed by skimming, than by any other means; a gentle, not a violent heat, is in this instance employed, because a violent heat would produce empyreumatic salts, the production of which is to be carefully avoided. A boiling heat is, in the continuation of the processes, made use of, because, after the first impurities have been skimmed off, contaminating empyreumatic salts are less readily formed, because a boiling heat is necessary to effect a complete development of the saccharine matter, and because the gradual concentration of the sugar is, by such a heat, to be best accomplished. Lime is employed, because it has a stronger affinity than sugar with all the contaminating matters, and particularly because it attracts into a neutral combination that excess of oxalic acid which is apt to exist in the saccharine solution. Skimming removes the new salts which the most easily assume a solid form. The dripping carries away a mixture of water, oil, earth, and sugar, from the crystallized sugar: for, in all our crystallizations we can never perform the process in the great way, with such nicety as to preserve it free from an inequality of proportions, that must necessarily occasion a residue. Repeated solution, clarification, evaporation, are requisite to produce pure white sugar from the brown and raw sugars; because the complete purification of this matter from acid and colouring matter, is an operation of great difficulty, and not to be finally completed without processes which are longer than can be conveniently performed, at the first, upon the sugar plantation. From vegetables of European growth, sugar is not to be easily obtained, unless the process of germination be first produced in them; or unless they have been penetrated by intense frost. Germination, or thorough freezing developes sugar into all vegetables in which its principles of hydrogen and carbon, with a small proportion of oxygen, exist in any considerable plenty. It is not improbable, but that if penetration by a freezing cold could be commanded at pleasure, with sufficient cheapness, it would enable us to obtain saccharine matter in a large proportion, from a variety of substances, from which even germination does not yield a sufficient quantity. In the beet and some other European vegetables, sugar is naturally formed by the functions of vegetation to perfect combination. From these the sugar is obtained by rasping down the vegetable, extracting by water its saccharine juice, evaporating the water charged with the juice to the consistency of syrup, clarifying, purifying, and crystallizing it, just in the same manner as sugar from the sugar-cane.

Sa'ccharum ace'rnum. See *Saccharum canadense.*

Sa'ccharum a'lbum. White or refined sugar.

Sa'ccharum alu'minis. Alum mixed with dragon's blood and dried.

Sa'ccharum canade'nse. The sugar obtained from a species of maple-tree, the *Acer pseudo-platanus*, of Linnæus, in Canada, and imported into some parts of Europe. It is supposed to be efficacious in disorders of the breast. Every part of the plant contains a sweet saccharine juice. The trunk, root, or branches, wounded early in the spring, bleed a large quantity of clear liquor, which, in its dilute state, tastes somewhat sweetish, and being inspissated, yields the concrete sugar, with a syrupy matter resembling melasses. The unboiled juice has been drank as an antiscorbutic. The Canada sugar is much esteemed in France in disorders of the breast.

Sa'ccharum ca'ndidum. Sugar-candy.

Sa'ccharum non purifica'tum. Brown sugar. It is often exhibited as a laxative in clysters, and internally to children.

Sa'ccharum officina'rum. The systematic name in some pharmacopœias of the sugar-cane. See *Saccharum.*

Sa'ccharum purifica'tum. Double refined, or loaf sugar. See *Saccharum.*

Sa'ccharum satu'rni. See *Plumbi superacetas.*

SACCHO-LACTIC ACID. Saclactic acid. The sugar of milk in combination with oxygen.

SACCHOLATE. *Saccholas.* A salt formed by the combination of the saccholactic acid with different bases, as saccholate of iron, saccholate of ammonia, &c. &c.

Sa'cculi adipo'si. The bursæ mucosæ of the joints.

SA'CCULUS. (Dim. of *saccus*, a bag.) A little bag.

Sa'cculus chyli'ferus. The receptacle of the chyle.

Saccu'lus cor'dis. The pericardium or receptacle of the heart.

Sa'cculus lachryma'lis. See *Saccus lachrymalis.*

SA'CCUS LACHRYMA'LIS. The lachrymal sac is situated in the internal canthus of the eye, behind the lachrymal caruncle, in a cavity formed by the os unguis. It receives the tears from the puncta lachrymalia, and conveys them into the ductus lachrymalis.

Sa'cer. (From *sagur*, secret, Heb.) Sacred. Applied to some diseases which were supposed to be immediately inflicted from heaven, as *sacer morbus*, the epilepsy, *sacer ignis, erysipelas*, &c. A bone is called the *os sacrum*, because it was once offered in sacrifices. Sacer also means belonging to the os sacrum.

SACK. A wine used by our ancestors, which some have taken to be Rhenish, and others Canary wine. Probably it was what is called dry mountain, or some Spanish wine of that sort. Howell, in his French and English Dictionary, 1650, translates sack by the words vin d'Espagne. Vin. sec.

Sa'cra he'rba. Common vervain.

Sa'cra tinctu'ra. Made of aloes, canella alba and mountain wine.

SACRAL. Of or belonging to the sacrum; as sacral arteries, veins, nerves, muscles, &c,

Sa'cro coccygæ'us. A muscle arising from the sacrum and inserted into the os coccygis.

SACRO-LUMBA'LIS. *Sacro-lumbaris*, of authors. *Lumbo-costo trachelien*, of Dumas. A long muscle, thicker and broader below than above, and extending from the os sacrum to the lower part of the neck, under the serrati postici rhomboideus, trapezius, and latissimus dorsi. It arises in common with the longissimus dorsi, tendinous without, and fleshy within, from the posterior part of the os sacrum; from the posterior edge of the spine of the ilium; from all the spinous processes, and from near the roots of the transverse processes of the lumbar vertebræ. At the bottom of the back it separates from the longissimus dorsi, with which it had before formed, as it were, only one muscle, and ascending obliquely outwards, gradually diminishes in thickness, and terminates above in a very narrow point. From the place where it quits the longissimus dorsi, to that of its termination, we find it fleshy at its posterior, and tendinous at its anterior edge. This tendinous side sends off as many long and thin tendons as there are ribs. The lowermost of these tendons are broader, thicker, and shorter than those above; they are inserted into the inferior edge of each rib, where it begins to be curved forwards towards the sternum, excepting only the uppermost and last tendon, which ends in the posterior and inferior part of the transverse process of the last vertebra of the neck. From the upper part of the five, six, seven, eight, nine, ten, or eleven lower ribs, (for the number, though most commonly seven or eight, varies in different subjects,) arise as many thin bundles of fleshy fibres, which, after a very short progress, terminate in the inner side of this muscle, and have been named by Steno, *musculi ad sacro lumbalem accessorii.* Besides these, we find the muscle sending off a fleshy slip from its upper part, which is inserted into the posterior and inferior part of the transverse processes of the five inferior vertebræ of the neck, by as many distinct tendons. This is generally described as a distinct muscle. Diemerbroeck, and Douglas, and Albinus after him, call it *cervicalis descendens.* Winslow names it *transversalis collateralis colli.* Morgagni considers it as an appendage to the sacro lumbalis. The uses of this muscle are to assist in erecting the trunk of the body, in turning it upon its axis or to one side, and in drawing the ribs downwards. By means of its upper slip, it serves to turn the neck obliquely backwards, or to one side.

SACRO-SCIATIC LIGAMENTS. The ligaments which connect the ossa innominata with the os sacrum.

SA'CRUM. (So called from *sacer*, sacred; because it was formerly offered in sacrifices.) *Os sacrum. Os basilare.* The os sacrum derives its name from its being offered in sacrifice by the ancients, or perhaps from its supporting the organs of generation, which they considered as sacred. In young subjects it is composed of five or six pieces, united by cartilage; but in more advanced age it becomes one bone, in which, however, we may still easily distinguish the marks of the former separation. Its shape has been sometimes compared to an irregular triangle; and sometimes, and perhaps more properly, to a pyramid, flattened before and behind, with its basis placed towards the lumbar vertebræ, and its point terminating in the coccyx. We find it convex behind, and slightly concave before, with its inferior portion bent a little forwards. Its anterior surface is smooth, and affords four, and sometimes five transverse lines, of a colour different from the rest of the bone. These are the remains of the intermediate cartilages by which its several pieces were united in infancy. Its posterior convex surface has several prominences, the most remarkable of which are its spinous processes; these are usually three in number, and gradually become shorter, so that the third is not so long as the second, nor the second as the first. This arrangement enables us to sit with ease. Its transverse processes are formed into one oblong process, which becomes gradually smaller as it descends. At the superior part of the bone we observe two oblique processes, of a cylindrical shape, and somewhat concave, which are articulated with the last of the lumbar vertebræ. At the base of each of these oblique processes is a notch, which, with such another in the vertebra above it, forms a passage for the twenty-fourth spinal nerve. In viewing this bone, either before or behind, we observe four, and sometimes five holes on each side, situate at each extremity of the transverse lines which mark the divisions of the bone. Of these holes, the anterior ones, and of these again, the uppermost, are the largest, and afford a passage to the nerves. The posterior holes are smaller, covered with membranes, and destined for the same purpose as the former. Sometimes at the bottom of the bone there is only a notch, and sometimes there is a hole common to it and the os coccygis. The cavity between the body of this bone and its processes, for the lodgment of the spinal marrow, is triangular, and becomes smaller as it descends, till at length it terminates obliquely on each side at the lower part of the bone. Below the third division of the bone, however, the cavity is no longer completely bony, as in the rest of the spine, but is defended posteriorly only by a very strong membrane; hence a wound in this part may be attended with the most dangerous consequences. This bone is articulated above, with the last lumbar vertebra: laterally, it is firmly united, by a broad irregular surface, to the ossa innominata, or hip-bones: and below it is joined to the os coccygis. In women the os sacrum is usually shorter, broader and more curved, than in men, by which means the cavity of the pelvis is more enlarged.

Safflower. See *Carthamus.*

Saffron. See *Crocus.*

Saffron, bastard. See *Carthamus.*

Saffron, meadow. See *Colchicum.*

Saffron of steel. A red oxyde of iron.

SAGAPE'NUM. (The name is derived from some eastern dialect.) *Serapinum.* It is conjectured that this concrete gummi-resinous juice is the production of an oriental umbelliferous plant. Sagapenum is brought from Persia and Alexandria in large masses, externally yellowish, internally paler, and of an horny clearness. Its taste is hot and biting, its smell of the alliaceous and fetid kind, and its virtues are similar to those which have been ascribed to assafœtida, but weaker, and consequently it is less powerful in its effects.

Sage. See *Salvia.*

Sage of Bethlehem. See *Pulmonaria.*

Sage of Jerusalem. See *Pulmonaria officinalis.*

Sage of virtue. See *Salvia hortensis minor.*

SAGITTAL SUTURE. (*Sutura sagittalis*, from *sagitta*, an arrow.) *Sutura virgata, obelæa, rhabdoides.* The suture which unites the two parietal bones. It has been named *sagittal*, from its lying between the coronal and lambdoidal sutures, as an arrow betwixt the string and the bow.

SAGITTA'RIUM ALEXIPHA'RMACUM. *Malacca radix. Canna indica. Arundo indica.* The name of a root cultivated with great care in Jamaica, and supposed to be a remedy for the wounds of poisonous arrows.

SAGITTA'RIA. (So called from *sagitta*, an arrow, in allusion to the shape of the leaves in the original species and some others.) The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Polyandria.*

SAGITTA'RIA SAGITTIFO'LIA. The systematic name of the common arrow-head, whose roots are esculent but not very nutritious.

SAGO. *Sagus. Sagu.* A dry fecula, obtained from the pith of a species of palm, the *Cycas circualis*, of Linnæus, in the islands of Java, Molucca, and the Philippines. The same substance is also brought from the West Indies, but it is inferior to that brought from the East. Sago becomes soft and transparent by boiling in water, and forms a light and agreeable liquid, much recommended in febrile, phthisical and calculous disorders, &c. To make it palatable, it is customary to add to it, when boiled or softened with water, some lemon juice, sugar and wine.

SAGU. See *Sago.*

Saint Anthony's fire. See *Erysipelas.*

Saint Ignatius's bean. See *Ignatia amara.*

Saint James's wort. See *Senecio Jacobæa.*

Saint John's wort. See *Hypericum.*

Saint Vitus's dance. See *Chorea sancti Viti.*

SAL ABSI'NTHII. Salt of wormwood. This salt is an imperfect carbonate of potash. See *Potassæ subcarbonas.*

SAL ACETOSE'LLÆ. The salt of wood-sorrel, usually vended for salt of lemons, is an acidulous oxalate of potash, and called in the new chemical nomenclature *potassæ super-oxalas.*

SAL ALKALI'NUS FI'XUS. See *Alkali fixum.*

SAL ALKALI'NUS VOLATI'LIS. See *Ammonia.*

SAL AMMONIAC. *Murias ammoniæ.* A saline concrete formed by the combination of the muriatic acid with ammonia. This salt is obtained from several sources.

1. It is found in places adjacent to volcanoes. It appears in the form of an efflorescence, or groups of needles, separate or compacted together, generally of a yellow or red colour, and mixed with arsenic and orpiment; but no use is made of that which is procured in this way.

2. In Egypt it is made in great quantities from the soot of camel's dung, which is burnt at Cairo instead of wood. This soot is put into large round bottles, a foot and a half in diameter, and terminating in a neck two inches long. The bottles are filled up with this matter to within four inches of the neck. Each bottle holds about forty pounds of soot, and affords nearly six pounds of salt. The vessels are put into a furnace in the form of an oven, so that only the necks appear above. A fire of camel's dung is kindled beneath it, and continued for three days and three nights. On the second and the third day the salt is sublimated. The bottles are then broken, and the salt is taken out in cakes. These cakes, which are sent just as they have been taken out of the bottles in Egypt, are convex, and unequal on the one side; on the middle of this side they exhibit each a tubercle corresponding to the neck of the bottle in which it was prepared. The lower side is concave, and both are sooty.

3. In this country sal ammoniac is likewise prepared in great quantities. The volatile alkali is obtained from soot, bones, and other substances known to contain it. To this the sulphuric acid is added, and the sulphate of ammonia so formed is decomposed by muriate of soda or common salt through a double affinity. The liquor obtained in consequence of this decomposition contains sulphate of soda and muriate of ammonia. The first is crystallized, and the second sub-

limated so as to form cakes, which are then exposed to sale.

Ammoniacal muriate has a poignant, acrid, and urinous taste. Its crystals are in the form of long hexahedral pyramids, a number of them are sometimes united together in an acute angular direction, so as to exhibit the form of feathers. M. Rome de Lille thinks the crystals of ammoniacal muriate to be octahedrons bundled together. This salt is sometimes, but not frequently, found in cubic crystals in the middle of the concave hollow part of the sublimated cakes. It possesses one singular physical property, a kind of ductility or elasticity, which causes it to yield under the hammer, or even the fingers, and makes it difficult to reduce to a powder. Muriate of ammonia is totally volatile, but a very strong fire is requisite to sublime it. It is liable to no alteration from air; it may be kept for a long time without suffering any change; it dissolves very readily in water. Six parts of cold water are sufficient to dissolve one of the salt. A considerable cold is produced as the solution takes place, and this cold is still keener when the salt is mixed with ice. This artificial cold is happily applied to produce several phenomena, such as the congelation of water on certain occasions, the crystallization of certain salts, the fixation and preservation of certain liquids, naturally very subject to evaporation, &c.

Sal ammoni′acum aceto′sum. See *Ammoniæ acetatis liquor.*

Sal ammoni′acum li′quidum. See *Ammoniæ acetatis liquor.*

Sal ammoni′acum martia′le. See *Ferrum ammoniatum.*

Sal ammoni′acum secre′tum glaube′ri. See *Sulphas ammoniæ.*

Sal ammoni′acum vegeta′bile. See *Ammoniæ acetatis liquor.*

Sal ammoni′acus fi′xus. The muriate of lime was formerly so termed.

Sal ammoni′acus nitro′sus. See *Nitras ammoniæ.*

Sal antimo′nii. Tartar emetic.

Sal arge′nti. Salt of silver. See *Argenti nitras.*

Sal catha′rticus ama′rus. See *Magnesiæ sulphas.*

Sal catha′rticus anglica′nus. See *Magnesiæ sulphas.*

Sal catha′rticus glaube′ri. See *Sodæ sulphas.*

Sal commu′nis. See *Sodæ murias.*

Sal co′rnu ce′rvi vola′tile. See *Ammoniæ subcarbonas.*

Sal culina′ris. See *Sodæ murias.*

Sal de duo′bus. See *Potassæ sulphas.*

Sal diure′ticus. See *Potassæ acetas.*

Sal digesti′vus sy′lvii. A natural salt, formed of muriatic acid and potash. See *Murias potassæ.*

Sal epsome′nsis. See *Magnesiæ sulphas.*

Sal essentia′lis ta′rtari. See *Tartaric acid.*

Sal febri′fugus sy′lvii. See *Murias Potassæ.*

Sal fon′tium. See *Sodæ murias.*

Sal fo′ssilis. See *Sodæ murias.*

Sal ge′mmæ. Common or rock salt. See *Sodæ murias.*

Sal glaube′ri. See *Sodæ sulphas.*

Sal herba′rum. See *Potassæ subcarbonas.*

Sal mari′nus. See *Sodæ murias.*

Sal ma′rtis. See *Ferri sulphus.*

Sal ma′rtis muria′ticum sublima′tum. See *Ferrum ammoniatum.*

Sal microco′smicus. The compound saline matter obtained by inspissating human urine.

Sal mira′bilis glaube′ri. See *Sodæ sulphas.*

Sal muria′ticus. See *Sodæ murias.*

Sal planta′rum. See *Potassæ subcarbonas.*

Sal polychre′stus. See *Potassæ sulphas.*

Sal polychre′stus glase′ri. See *Potassæ sulphas.*

Sal polychre′stus seigne′tti. See *Soda tartarizata.*

Sal prune′llæ. Nitrate of potash cast into flat cakes or round balls.

Sal rupelle′nsis. See *Soda tartarizata.*

Sal satu′rni. See *Plumbi superacetas.*

Sal sedati′vus. See *Boracic acid.*

Sal sedati′vus hombe′rgii. See *Boracic acid.*

Sal sedlice′nsis. See *Magnesiæ sulphas.*

Sal seigne′tti. See *Soda tartarizata.*

Sal su′ccini. The succinic acid. See *Succinic acid.*

Sal ta′rtari. See *Potassæ subcarbonas,* and *Potassa.*

Sal therma′rum carolina′rum. A union of sulphuric acid with magnesia. See *Magnesiæ sulphas.*

Sal vegeta′bilis. See *Potassæ tartras.*

Sal vola′tile. See *Spiritus ammoniæ aromaticus,* and *Ammonia.*

Sal vola′tilis sa′lis ammoni′aci. See *Ammoniæ subcarbonas.*

SALEP. *Salap. Salab.* See *Orchis morio.*

SALICO′RNIA. The name of a genus of plants in the Linnæan system. Class, *Monandria.* Order, *Monogynia.*

Salico′rnia europæ′a. The systematic name of the jointed glass wort, which is gathered by the country people and sold for samphire. It forms a good pickle with vinegar, and is little inferior to the samphire.

SALINE SUBSTANCES. The number of saline substances is very considerable; and they possess peculiar characters, by which they are distinguished from other substances. These characters are founded on certain properties, which it must be confessed, are not accurately distinctive of their true nature. All such substances, however, as possess several of the four following properties are considered as saline: 1. A strong tendency to combination, or a very strong affinity of composition; 2. A greater or lesser degree of sapidity; 3. A greater or lesser degree of solubility in water; 4. Perfect incombustibility.

Saliu′nca. See *Valeriana celtica.*

SALI′VA. (So called, *a salino sapore*, from its salt taste, or from σιαλος, spittle.) The fluid which is secreted by the salivary glands into the cavity of the mouth. The *secretory organ* is composed of three pair of salivary glands. 1. The *parotid glands*, which evacuate their saliva by means of the *Stenonian duct* behind the middle dens molaris of the upper jaw. 2. The *submaxillary glands*, which pour out their saliva through the *Warthonian ducts* on each side of the frenulum of the tongue by a narrow osculum. 3. The *sublingual glands*, situated between the internal surface of the maxilla and the tongue, which pour out their saliva through numerous *Rivinian ducts* at the apex of the tongue.

The saliva in the cavity of the mouth has mixed with it. 1. The *mucus of the mouth*, which exhales from the labial and genal glands. 2. A *roscid vapour*, from the whole surface of the cavity of the mouth. The saliva is continually swallowed with, or without masticated food, and some is also spit out. It has no *colour* nor *smell;* it is *tasteless*, although it contains a little salt, to which the nerves of the tongue are accustomed. Its *specific gravity* is somewhat greater than water. Its *consistence* is rather plastic and spumous, from the entangled atmospheric air. The *quantity* of twelve pounds is supposed to be secreted in twelve hours. During mastication and speaking the secretion is augmented, from the mechanical pressure of the muscles upon the salivary glands. Those who are hungry secrete a great quantity, from the sight of agreeable food. It is imperfectly dissolved by water; somewhat coagulated by alkohol; and congealed with more difficulty than water. It is inspissated by a small dose, and dissolved in a large dose, of mineral acids. It is also soluble in carbonated alkali. Caustic alkali and quick lime extract volatile alkali from saliva. It corrodes copper and iron; and precipitates silver and lead from containing muriatic acid. It assists the spirituous fermentation of farinaceous substances; hence barbarous nations prepare an inebriating drink from the chewed roots of the *Jatropha Manihot* and *Piper Methisticum.* It possesses an antiseptic virtue, according to the experiments of the celebrated Pringle. It easily becomes putrid in warm air, and gives off volatile alkali.

Constituent Principles. Saliva appears to consist of water, albumen, ammoniacal salt and animal earth. Of water, there are four-fifths given out by distillation. The albumen is detected by alcohol. The ammoniacal salt is demonstrated by triturating quicklime with saliva; and the animal earth from salival calculus, and the products of fire.

The use of the saliva is, 1. It augments the taste of the food, by the evolution of sapid matter. 2. During mastication, it mixes with, dissolves, and resolves into its principles, the food; and changes it into a pultaceous mass, fit to be swallowed: hence it commences chymification. 3. It moderates thirst, by moistening the cavity of the mouth and fauces.

SALIVAL DUCTS. The excretory ducts of the salival glands. That of the parotid gland is called the *Stenonian* duct; those of the submaxillary glands the *Warthonian* ducts; and those of the sublingual, the *Rivinian* ducts.

SALIVAL GLANDS. Those glands which secrete the saliva are so termed. See *Saliva.*

Saliva′ntia. (From *saliva*, spittle.) Medicines which excite salivation.

Saliva′ria. (From *saliva*, the spittle; so called because it excites a discharge of saliva.) Pellitory of Spain.

Saliva′ris he′rba. See *Anthemis Pyrethrum.*

SALIVA′TIO. An increased secretion of saliva. See *Ptyalismus.*

SA′LIX. (From *sala*, Heb.)

1. The name of a genus of plants in the Linnæan system. Class, *Dioecia.* Order, *Diandria.* The willow.

2. The pharmacopœial name of *Salix caprea;* which see.

Sa′lix a′lba. See *Salix fragilis.*

Sa′lix ca′prea. The systematic name of a species of willow, the bark of whose branches possess the same virtues with that of the fragilis. See *Salix fragilis.*

Sa′lix fra′gilis. The systematic name of the common crack willow. *Salix.* The bark of the branches of this species manifests a considerable degree of bitterness to the taste, and is very adstringent. It is recommended as a good substitute for Peruvian bark, and is said to cure intermittents and other diseases requiring tonic and adstringent remedies. Not only the bark of this species of salix, but those also of several others possess similar qualities, particularly of the salix alba and salix pentandria, both of which are recommended in the foreign pharmacopœias. But Dr. Woodville is of opinion that the bark of the salix triandria is more effectual than that of any other of this genus; at least its sensible qualities give it a decided preference. The trials Dr. Cullen made were with the bark of the salix pentandria, taken from its branches, the third of an inch diameter, and of four or five years growth. Nevertheless, he adds, in intermittent fevers, Bergius always failed with this bark.

Sa'lix penta'ndria. The bark of the branches of this species of willow possesses the same virtues as that of the fragilis. See *Salix fragilis.*

Sa'lix vituli'na. The bark of the branches of this species of willow may be substituted for the fragilis. See *Salix fragilis.*

Salpingo-pharynge'us. This muscle is composed of a few fibres of the palato-pharyngeus, which it assists in dilating the mouth of the Eustachian tube.

Salpingo-staphili'nus. See *Levator palati.*

Salpingo-staphili'nus inte'rnus. See *Levator palati.*

Salsafy. The root of the purple goat's beard. See *Tragopogon pratense.*

SALSO'LA. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

Salso'la ka'li. Snail-seeded glass-wort or salt-wort. *Kali spinosum cochleatum. Tragus, sive Tragum Matthioli.* The systematic name of the plant which affords the mineral alkali. See *Soda.*

Salso'la sati'va. The systematic name of a plant, which affords the mineral alkali. See *Soda.*

Salso'la so'da. The systematic name of a plant which affords mineral alkali. See *Soda.*

Salt, cathartic. See *Magnesiæ sulphas,* and *Sodæ sulphas.*

Salt, common. See *Sodæ murias.*

Salt, Epsom. See *Magnesiæ sulphas.*

Salt-petre. See *Nitre.*

Salt, Rochelle. See *Soda tartarizata.*

Salt, sea. See *Sodæ murias.*

Salt of steel. See *Ferri sulphas.*

SALTS. See *Saline substances.* Salts, with respect to their chemical properties, are divided into two classes; into acid salts or acids, and into alkaline salts or alkalis; and from the mutual combination of these two arises a third class, viz. that of neutral salts.

SALTS, ACID. These are distinguished by their sour taste when diluted with water. See *Acid.*

SALTS, ALKALINE. These possess a urinous, burning, and caustic taste, turn the syrup of violets to a green, have a strong affinity for acids, dissolve animal substances, unite readily with water, combine with oils and fat, and render them miscible with water, dissolve sulphur, and are crystallizable. See *Alkali.*

SALTS, NEUTRAL. Secondary salts. Under the name of neutral or secondary salts are comprehended such matters as are composed of two primitive saline substances combined together in a certain proportion. These salts are called neutral, because they do not possess the characters of primitive salts; that is to say, they are neither acid nor alkaline: such as Epsom salts, nitre, &c. But in many secondary salts the qualities of one ingredient predominate; as tartar, or supertartrate of potash, has an excess of acid; borax, or subborate of soda, an excess of base. The former are termed acidulous, the latter sub-alkaline salts.

SALTS, PRIMITIVE. Simple salts. Under this order is comprehended those salts which were formerly thought to be simple or primitive, and which are occasionally called simple salts. The accurate experiments of the moderns have proved that these are for the most part compounded; but the term is retained with greater propriety when it is observed, that these salts compose, when united, salts which are termed secondary. These salts are never met with perfectly pure in nature, but require artificial processes to render them so. This order is divided into three genera, comprehending saline terrestrial substances, alkalis, and acids.

SALTS, SECONDARY. See *Neutral salts.*

Saltwort. See *Salsola kali.*

SALVATE'LLA. (*Salvatella, sc. vena,* from *salus,* health, because the opening of it was formerly thought to be of singular use in melancholy.) This vein runs along the little finger, unites upon the back of the hand with the cephalic of the thumb, and empties its blood into the internal and external cubical veins.

SA'LVIA. (*A salvendo.*)

1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.* Sage.

2. The pharmacopœial name of the common sage. See *Salvia officinalis.*

Sa'lvia horte'nsis mi'nor. The small sage, or sage of virtue. A variety of the officinal sage, possessing similar virtues.

Sa'lvia officina'lis. The systematic name of the garden sage. *Elelisphacos. Salvia officinalis, foliis lanceolato ovatis integris crenulatis, floribus spicatis, calycibus acutis,* of Linnæus. In ancient times sage was celebrated as a remedy of great efficacy, as would appear from the following lines of the school of Salernum:

Cur moriatur homo, cui salvia crescit in
horto?
Contra vim mortis, non est medicamen in
hortis?
Salvia salvatrix, naturæ conciliatrix.
Salvia cum ruta faciunt tibi pocula tuta.

But at present it is not considered as an article of much importance. It has a fragrant, strong smell; and a warm, bitterish, aromatic taste, like other plants containing an essential oil. It has a remarkable property in resisting the putrefaction of animal substances, and is in frequent use among the Chinese as a tonic, in the form of tea, in debility of the stomach and nervous system.

Sa′lvia sclare′a. The systematic name of the garden clary; called *horminum* in the pharmacopœias. The leaves and seeds are recommended as corroborants and antispasmodics, particularly in leucorrhœas and hysterical weaknesses. They have a bitterish, warm taste, and a strong smell, of the aromatic kind.

SAMBU′CUS. (From *sabucca*, Heb. a musical instrument formerly made of this tree.) Elder.

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Trigynia*.

2. The pharmacopœial name of the elder-tree. See *Sambucus nigra*.

Sambu′cus e′bulus. The systematic name of the dwarf elder. *Ebulus*. *Chamæacte*. *Sambucus humilis*. *Sambucus herbacea*. Dwarf elder, or dane-wort. The root, interior bark, leaves, flowers, berries, and seeds of this herbaceous plant, *Sambucus; cymis trifidis, stipulis foliaceis, caule herbaceo*, of Linnæus, have all been administered medicinally, in moderate doses, as resolvents and deobstruents, and, in larger doses, as hydragogues. The plant is chiefly employed by the poor of this country, amongst whom it is in common use as a purgative, but Dr. Cullen speaks of it as a violent remedy.

Sambu′cus ni′gra. The systematic name of the elder-tree. *Sambucus vulgaris*. *Sambucus arborea*. *Acte*. *Infelix lignum*. *Sambucus nigra; cymis quinque-partitis, foliis pinnatis, caule arboreo*, of Linnæus. This indigenous plant has an unpleasant narcotic smell, and some authors have reported its exhalations to be so noxious, as to render it unsafe to sleep under its shade. The parts of this tree that are proposed for medicinal use in the pharmacopœias are the inner bark, the flowers, and the berries. The first has scarcely any smell, and very little taste; on first chewing, it impresses a degree of sweetness, which is followed by a very slight but durable acrimony, in which its powers seem to reside. From its cathartic property it is recommended as an effectual hydragogue by Sydenham and Boerhaave; the former directs three handfuls of it to be boiled in a quart of milk and water, till only a pint remains, of which one half is to be taken night and morning, and repeated for several days; it usually operates both upwards and downwards, and upon the evacuation it produces, its utility depends. Boerhaave gave its expressed juice in doses from a drachm to half an ounce. In smaller doses it is said to be an useful aperient and deobstruent in various chronic disorders. The flowers have an agreeable flavour; and infusions of them, when fresh, are gently laxative and aperient. When dry, they are said to promote chiefly the cuticular excretion, and to be particularly serviceable in erysipelatous and eruptive disorders. Externally they are used in fomentations, &c. and in the London pharmacopœia are directed in the form of an ointment. The berries in taste are somewhat sweetish, and not unpleasant; on expression they yield a fine purple juice, which proves an useful aperient and resolvent in sundry chronic diseases, gently loosening the belly, and promoting the urine and perspiration.

Samphire. See *Crithmum maritimum*.

Sampsu′chus. See *Thymus mastichina*.

Sampsy′chum. (From σαω, to preserve, and ψυχη, the mind,) because of its cordial qualities. Marjoram.

Sanati′va. (From *sano*, to cure.) Medicines which heal diseases.

SANCTORIUS, **Sanctorius**, was born in 1561, at Capo d'Istria. He studied medicine at Padua, where he took his degree, and then settled at Venice, and practised with considerable success. At the age of fifty, however, he was appointed professor of the theory of medicine at Padua; in which office he distinguished himself for thirteen years. He was then allowed to retire on his salary, finding his health impaired by the fatigue of the visits, which he was frequently obliged to make in his professional capacity to Venice; where he passed the remainder of his life in great reputation. On his death, in 1636, a statue of marble was raised to his memory; and an annual oration was instituted by the College of Physicians, to whom he had bequeathed an annuity, in commemoration of his benevolence. Sanctorius first called the attention of physicians to the cutaneous and pulmonary transpiration, which he proved to exceed the other excretions considerably in weight; and he maintained that this function must have a material influence on the system, and was deserving of great consideration in the treatment of diseases. There is, no doubt, much truth in this general observation; but in its application to practice, he appears to have gone to an extravagant length, and to have contributed much to prolong the reputation of the humoral pathology. His treatise entitled, "Ars de Statica Medicina," was first published in 1614, and passed through more than twenty editions, including translations, with various commentaries: it is written in an elegant and perspicuous Latin style. He was also author of a Method of avoiding Errors in Medicine, to which was afterwards added an essay "De Inventione Remediorum;" and of Commentaries on some of the ancient physicians. Besides the statical chair, by which he contrived to determine the weight of the Ingesta and Egesta, he invented an instrument for measuring the force of the pulse, and several others for surgical use; and he was the first who attempted to determine the temperature of the body by a thermometer, of which, indeed, he is considered as the inventor.

Sa′nctum se′men. The worm-seed, or santonicum.

Sandara′cha. (From *saghad narak*, Arab.) A gummy resin; also a sort of arsenic.

Sandara′cha arabum. This resinous juice appears to have been the produce of a large species of juniper-tree.

Sanders. See *Pterocarpus santalinus.*

Sandrack. (An Arabian word.) See *Juniperus communis.*

Sa′ndyx. (From *sani duk*, red, Arab.) Cerusse burnt till it becomes red.

SANGUIFICATION. (*Sanguificatio*, from *sanguis*, blood.) A natural function of the body, by which the chyle is changed into blood. The uses of sanguification are the generation of blood, which serves to fill the blood-vessels, to irritate and stimulate the heart and arteries, to generate or cause heat, to secrete the humours, and to excite the vital actions.

Sanguina′lis. (From *sanguis*, blood; so named from its uses in stopping bleedings.) The *Polygonum aviculare*, or knotgrass is sometimes so called: which see.

Sanguina′ria. (From *sanguis*, blood; so named from its use in stopping bleedings.) The *Polygonum aviculare*, or knotgrass, is sometimes so termed: which see.

Sanguineous apoplexy. See *Apoplexia.*

Sanguipu′rgium. (From *sanguis*, blood, and *purgo*, to purge.) A gentle fever, or such a one as by its discharges is supposed to purify the blood.

SA′NGUIS, (*-guinis*, m.) See *Blood.*

SA′NGUIS DRACO′NIS. See *Calamus rotang.*

Sa′nguis he′rculis. A name for the crocus.

SANGUISO′RBA. The name of a genus of plants in the Linnæan system. Class, *Triandria.* Order, *Monogynia.*

Sanguiso′rba officina′lis. The systematic name of the Italian pimpinel; which is not now in use.

SANGUISU′GA. (From *sanguis*, blood, and *sugo*, to suck.) The leech or blood-sucker. See *Leech.*

Sanicle. See *Sanicula.*

Sanicle, Yorkshire. See *Pinguicula.*

SANI′CULA. (From *sano*, to heal; so called from its virtues in healing.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of sanicle.

Sani′cula eborace′nsis. *Pinguicula. Sanicula montana. Viola palustris.* The Yorkshire sanicle or butter-wort. See *Pinguicula.*

Sani′cula europe′a. The systematic name of the sanicle. *Cucullata. Dodecatheon. Symphytum petræum. Sanicula mas. Diapensia cortusa.* This herb, *Sanicula Europea*, of Linnæus, was formerly recommended as a mild adstringent, and is supposed to have received its name from its sanative power. Its sensible qualities are a bitterish and somewhat austere taste, followed by an acrimony which chiefly affects the throat. It is only in use in the present day amongst the country people.

Sani′cula mas. See *Sanicula.*

SA′NIES. *Ichor.* This term is sometimes applied to a thin, limpid, and greenish discharge; and at other times to a thick and bloody kind of pus.

SA′NTALUM. (From *zandal*, Arab.) The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.* Saunders.

Sa′ntalum a′lbum. The systematic name of the yellow saunders. *Santalum citrinum. Santalum pallidum.* Yellow saunders. White saunders wood is of a pale white colour, often with a yellowish tinge, and, being destitute of taste or odour, it is superseded by the santalum citrinum, which is of a brownish yellow colour, of a bitterish aromatic taste, and of a pleasant smell, approaching to that of the rose. Both kinds are brought from the East Indies in billets, consisting of large thick pieces, which, according to Rumphius, are sometimes taken from the same, and sometimes from different trees. For though the white and yellow saunders are the wood of the same species of tree, yet the latter, which forms the central part of the tree, is not always to be found in sufficient quantity to repay the trouble and expense of procuring it, especially, unless the trees be old; while the white, which is the exterior part of the wood, is always more abundant, and is consequently much cheaper.

Yellow saunders, distilled with water, yields a fragrant essential oil, which thickens in the cold into the consistence of a balsam, approaching in smell to ambergris, or a mixture of ambergris and roses; the remaining decoction, inspissated to the consistence of an extract, is bitterish, and slightly pungent. Rectified spirit extracts, by digestion, considerably more than water; the colour of the tincture is a rich yellow. The spirit distilled off is slightly impregnated with the fine flavour of the wood; the remaining brownish extract has a weak smell, and a moderate balsamic pungency.

The wood is valued highly on account of its fragrance, hence the Chinese are said to fumigate their clothes with it, and to burn it in their temples in honour of their gods. Though still retained in the Materia Medica, it cannot be thought to possess any considerable share of medicinal power. Hoffman considers its virtues as similar to those of ambergris; and some others have esteemed it in the character of a corroborant and restorative.

Sa′ntalum ci′trinum. See *Santalum album.*

Sa′ntalum pa′llidum. See *Santalum album.*

Sa′ntalum ru′brum. Red saunders. See *Pterocarpus santalinus.*

Santoli′na. (From *santalum*, saunders, because it smells like the saunders wood.) See *Artemisia santonica.*

Santoli′na chamæ-cypari′ssus. The systematic name of the lavender cotton.

Santo′nicum. (From *Santonia*, its native place.) See *Artemisia Santonica.*

SAPHE′NA. (*Vena saphena:* from σαφης, visible.) The large vein of the leg, which ascends along the little toe over the external ancle, and evacuates part of the blood from the foot into the popliteal veins.

SAPIE′NTIÆ DE′NTES. The four last grinders are so called, because they appear when the person is supposed to be at years of discretion. See *Teeth.*

Sapi′ndus sapona′ria. The systematic name of the plant which affords soap-nuts. *Saponariæ nuculæ. Baccæ bermudenses.* Soap-berries. A spherical fruit, about the size of a cherry, whose cortical part is yellow, glossy, and so transparent as to show the spherical black nut which rattles within, and which includes a white kernel. It is the produce of the *Sapindus saponaria*, of Linnæus, which grows in Jamaica. It is said that the cortical part of this fruit has a bitter taste, and no smell; that it raises a soapy froth with water, and has similar effects with soap in washing; that it is a medicine of singular and specific virtue in chlorosis. They are not known in the shops of this country.

SA′PO, (*Sapo, -nis*, m.) Soap. A composition of oils, or fats, with an alkali. The medicinal soap, *sapo amygdalinus*, is made with oil of sweet almonds, and half its weight of caustic alkali. Common or soft soap, *sapo mollis*, is made of potash and oil, or tallow. Spanish, or Castile soap, *sapo durus*, of oil of olives and soda, or barilla. Black soap is a composition of train oil and an alkali; and green soap of hemp, linseed, or rape oil, with an alkali. The white Spanish soap, being made of the finer kinds of olive oil, is the best, and therefore preferred for internal use. Soap was imperfectly known to the antients. It is mentioned by Pliny as made of fat and ashes, and as an invention of the Gauls. Aretæus and others inform us, that the Greeks obtained their knowledge of its medical use from the Romans. Its virtues, according to Bergius, are detergent, resolvent, and aperient, and its use recommended in jaundice, gout, calculous complaints, and obstructions of the viscera. The efficacy of soap, in the first of these diseases, was experienced by Sylvius, and since recommended very generally by various authors who have written on this complaint; and it has also been thought of use in supplying the place of bile in the primæ viæ. The utility of this medicine in icterical cases, was inferred chiefly from its supposed power of dissolving biliary concretions; but this medicine has lost much of its reputation in jaundice, since it is now known, that gall-stones have been found in many after death, who had been daily taking soap for several months, and even years. Of its good effects in urinary calculous affections, we have the testimonies of several, especially when dissolved in lime-water, by which its efficacy is considerably increased; for it thus becomes a powerful solvent of mucus, which an ingenious modern author supposes to be the chief agent in the formation of calculi; it is, however, only in the incipient state of the disease that these remedies promise effectual benefit, though they generally abate the more violent symptoms, where they cannot remove the cause. With Boerhaave, soap was a general medicine; for as he attributed most complaints to viscidity of the fluids, he, and most of the Boerhaavian school, prescribed it, in conjunction with different resinous and other substances, in gout, rheumatism, and various visceral complaints. Soap is also externally employed as a resolvent, and gives name to several officinal preparations.

Sa′po terebi′nthinæ. Starkey's soap. "℞ kali preparati calidi, ℥j. Olei terebinth, ℥iii." The hot kali præparatum is to have the oil of turpentine gradually blended with it, in a heated mortar. Indolent swellings were formerly rubbed with this application, and perhaps some chronic affections of the joints might still be benefited by it.

SAPONA′RIA. (From *sapo*, soap; so called because its juice, like soap, cleans cloaths.)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Digynia.*

2. The pharmacopœial name of the soap-wort. Bruise-wort. See *Saponaria officinalis.*

Sapona′ria nu′cula. See *Sapindus saponaria.*

Sapona′ria officina′lis. The systematic name of the soap-wort. *Struthium. Lanaria. Lychnis sylvestris. Ibixuma.* The root of this plant, *Saponaria officinalis; calycibus cylindricis, foliis ovato-lanceolatis*, of Linnæus, is employed medicinally; it has no peculiar smell; its taste is sweetish, glutinous, and somewhat bitter. On being chewed for some time, it is said to discover a degree of acrimony, which continues to affect the mouth a considerable time. According to Neuman, two ounces of the root yielded eleven drachms of watery extract; but Cartheuser, from a like quantity, only obtained six drachms and twenty-four grains. This extract manifested a sweetish taste, followed by an acrid quality. The spirituous extract is less in quality, but of a more penetrating acrid taste. Decoctions of the root, on being sufficiently agitated, produce a saponaceous froth; a similar soapy quality is observable also in the extract, and still more manifestly in the leaves, in so much that they have been used by the mendicant monks as a substitute for soap in washing of their cloaths, and Bergius, who made several experiments with the saponaria, declares that it had all the effects of soap itself.

From these peculiar qualities of the saponaria, there can be little doubt of its possessing a considerable share of medical efficacy, which Dr. Woodville says he could wish to find faithfully ascertained.

The diseases for which the saponaria is recommended, as syphilis, gout, rheumatism, and jaundice, are not, perhaps, the complaints in which its use is most availing; for a fancied resemblance of the roots of saponaria with those of sarsaparilla, seems to have led physicians to think them similar in their effects; and hence they have both been administered with the same intentions, particularly in fixed pains, and venereal affections. Bergius says, "in arthritide, cura mercuriale, &c. nullum aptiorem potum novi." However, according to several writers, the most inveterate cases of syphilis were cured by a decoction of this plant, without the use of mercury.

Haller informs us that Boerhaave entertained an high opinion of its efficacy in jaundice and other visceral obstructions.

SAPONULES. *Saponuli.* Combinations of the volatile or essential oils with different bases; as *saponule of ammonia*, &c.

Saponules, acid. Combinations of the volatile or essential oils with different acids.

Sapo′ta. The oval-fruited sapota, whose seeds are sometimes given in the form of emulsion in calculous complaints, is the *Acras sapota*, of Linnæus. It is a native of South America, and bears a fruit like an apple, which has, when ripe, a luscious taste, resembling that of the marmalade of quinces, whence it is called natural marmalade.

Sa′ppan li′gnum. Logwood has been so called. See *Hæmatoxylon campechianum.*

Sapphi′rina a′qua. *Aqua cupri ammoniati.* Made by a solution of sal ammoniac in lime-water, standing in a copper vessel.

Sapphire. A gem of a sky-blue colour.

Saracens consound. See *Solidago virga aurea.*

Sa′rcium. (Dim. of σαρξ, flesh.) A caruncle, or small fleshy excrescence.

Sarci′tes. (From σαρξ, flesh.) An anasarca.

SARCOCE′LE. (From σαρξ, flesh, and κηλη, a tumour.) *Hernia carnosa.* This is a disease of the body of the testicle, and, as the term implies, consists, in general, in such an alteration made in the structure of it, as produces a resemblance to a hard fleshy substance, instead of that fine, soft, vascular texture, of which it is, in a natural and healthy state, composed.

The antient writers have made a great number of distinctions of the different kinds of this disease, according to its different appearances, and according to the mildness, or malignity of the symptoms with which it may chance to be attended. Thus, the *sarcocele*, the *hydro-sarcocele*, the *scirrhus*, the *cancer*, the *caro adnata ad testem*, and the *caro adnata ad vasa*, which are really little more than descriptions of different states and circumstances of the same disease, are reckoned as so many different complaints, requiring a variety of treatment, and deriving their origin from a variety of different humours.

Every species of sarcocele consists primarily in an enlargement, induration, and obstruction of the vascular part of the testicle; but this alteration is, in different people, attended with such a variety of circumstances, as to produce several different appearances, and to occasion the many distinctions which have been made.

If the body of the testicle, though enlarged, and indurated to some degree, be perfectly equal in its surface, void of pain, has no appearance of fluid in its tunica vaginalis, and produces very little uneasiness, except what is occasioned by its mere weight, it is usually called a simple sarcocele, or an indolent scirrhus; if, at the same time that the testis is enlarged and hardened, there be a palpable accumulation of fluid in the vaginal coat, the disease has by many been named a *hydro-sarcocele;* if the lower part of the spermatic vessels, and the epididymis were enlarged, hard, and knotty, they supposed it to be a fungous, or morbid accretion, and called it the *caro adnata ad vasa;* if the testicle itself was unequal in its surface, but at the same time not painful, they distinguish it by the title of *caro adnata ad testem;* if it was tolerably equal, not very painful, nor frequently so, but at the same time hard and large, they gave it the appellation of an occult or benign cancer; if it was ulcerated, subject to frequent acute pain, to hæmorrhage, &c. it was known by that of a malignant or confirmed cancer. These different appearances, though distinguished by different titles, are really no more than so many stages (as it were) of the same kind of disease, and depend a great deal on several accidental circumstances, such as age, habit, manner of living, &c. It is true, that many people pass several years with this disease, under its most favourable appearances, and without encountering any of its worst; but, on the other hand, there are many, who, in a very short space of time run through all its stages. They who are most conversant with it, know how very convertible its mildest symptoms are into its most dreadful ones, and how very short a space of time often intervenes between the one and the other.

There is hardly any disease affecting the human body, which is subject to more variety than this is, both with regard to its first manner of appearance, and the changes which it may undergo.

Sometimes the first appearance is a mere simple enlargement and induration of the body of the testicle; void of pain, without inequality of surface, and producing no uneasiness, or inconvenience, except what is occasioned by its mere weight. And some people are so fortunate to have it remain in this state for a very considerable length of time without visible or material alteration. On the other hand, it sometimes happens that very soon after its appearance in this mild manner, it suddenly becomes unequal and knotty, and is attended with very acute pains darting up to the loins and back; but still remaining entire, that is, not bursting through the integuments. Sometimes the fury of the disease brooks no restraint, but making its way through all the membranes which envelope the testicle, it either produces a large, foul, stinking, phagedenic ulcer, with hard edges, or it thrusts forth a painful gleeting fungus, subject to frequent hæmorrhage.

Sometimes an accumulation of water is made in the tunica vaginalis, producing that mixed appearance, called the *hydrosarcocele*.

Sometimes there is no fluid at all in the cavity of the tunica vaginalis; but the body of the testicle itself is formed into cells, containing either a turbid kind of water, a bloody sanies, or a purulent fœtid matter. Sometimes the disorder seems to be merely local, that is, confined to the testicle, not proceeding from a tainted habit, nor accompanied with diseased viscera, the patient having all the general appearances and circumstances of health, and deriving his local mischief from an external injury. At other times, a pallid, leaden countenance, indigestion, frequent nausea, colicky pains, sudden purgings, &c. sufficiently indicate a vitiated habit, and diseased viscera, which diseased viscera may also sometimes be discovered and felt.

The progress also which it makes from the testis upward, toward the process, is very uncertain; the disease occupying the testicle only, without affecting the spermatic process, in some subjects, for a great length of time; while, in others, it totally spoils the testicle very soon, and almost as soon, seizes on the spermatic chord.

SARCOCO'LLA. (From σάρξ, flesh, and κολλα, glue; because of its supposed power of gluing together wounds.) See *Penæa*.

Sarcoepiploce'le. Enlarged testicle, with rupture, containing omentum.

Sarco'logy. (*Sarcologia.* From σαρξ, flesh, and λογος, a discourse.) The doctrine of the muscles and soft parts.

SARCO'MA. (From σαρξ, flesh.) *Sarcosis. Porrus. Sarcophyia. Nævus.* A fleshy excrescence. A genus of disease in the Class, *Locales*, and Order, *Tumores*, of Cullen.

SARCO'MPHALUS. (From σαρξ, flesh, and ομφαλος, the navel.) A fleshy excrescence about the navel.

Sarcophy'ia. (From σαρξ, flesh, and φυω, to grow.) A fleshy excrescence.

Sarcopyo'des. (From σάρξ, flesh, and ϖυον, pus.) Applied to the purulent, fleshy discharge which is thrown up in some stages of consumption.

SARCO'SIS. (From σαρξ, flesh.) A fleshy tumour. The generation of flesh.

Sarco'tica. (From σαρξ, flesh.) Medicines which promote the generation of flesh in wounds.

Sardi'asis. (From σαρδωνιη, the sardonia, or herb, which, being eaten, causes convulsive laughter.) The *Risus sardonicus*, or a convulsive involuntary laughter.

Sardo'nia. (From *Sardonia*, its native soil.) A kind of smallage.

SARDONIC LAUGH. *Risus sardonicus*; so called from the herb *sardonia*, which being eaten is said to cause a deadly convulsive laughter. Hence risus sardodicus, the sardonian laughter, or spasmodic grin.

Sardo'nicus ri'sus. See *Sardonic laugh.*

SARSAPARI'LLA. (This word is of Spanish origin, signifying a red tree.) See *Smilax sarsaparilla.*

Sarsapari'lla germa'nica. The root of the *Carex arenaria*, of Linnæus, is so termed, and it appears, that the *carex disticha* and *hirta* have also been collected, and their roots used indifferently instead of the true sarsaparilla. See *Carex arenaria.*

SARTO'RIUS. (*Sartorius*, sc. *musculus*; from *sartor*, a tailor, because tailors cross their legs with it.) *Sartorius seu longissimus femoris*, of Cowper; and *Ilio cresti tibial*, of Dumas. This flat and slender muscle, which is the longest of the human body, and from an inch and a half to two inches in breadth, is situated immediately under the integuments, and extends obliquely from the upper and anterior part of the thigh, to the upper, anterior, and inner part of the tibia, being enclosed by a thin membranous sheath, which is derived from the adjacent *fascia lata*. It arises, by a tendon of about half an inch in breadth, from the outer surface and inferior edge of the anterior superior spinous process of the ilium, but soon becomes fleshy, and runs down a little way obliquely inwards, and then for some space upon the rectus, nearly in a straight direction; after which it passes obliquely over the vastus internus, and the lower part of the adductor longus, and then running down between the tendons of the adductor magnus and the gracilis, is inserted, by a thin tendon, into the inner part of the tibia, near the inferior part of its tuberosity, and for the space of an inch or two below it. This tendon sends off a thin aponeurosis, which is spread over the upper and posterior part of the leg. This muscle serves to bend the leg obliquely inwards, or to roll the thigh outwards, and at the same time to bring one leg across the other, on which account Spigelius first gave it the name of *sartorius*, or the tailor's muscle.

SA'SSAFRAS. (*Quasi saxifraga*; from *saxum*, a stone, and *frango*, to break; so called because a decoction of its wood was supposed good for the stone.) See *Laurus sassafras*.

SATA'NUS DEVO'RANS. The red lion, or antimony.

SATELLITE VEINS. The veins which accompany the brachial artery as far as the bend of the cubit.

SA'THE. The penis.

SATURA'NTIA. Medicines which neutralize the acid in the stomach.

SATURATION. A term employed in pharmacy and chemistry to express the state of a body which has a power of dissolving another, to a certain extent only, in which it has effected that degree of solution; thus, nitric acid for instance, can only dissolve a certain quantity of lime, beyond which it does not act, having lost its former affinity; this degree of solution is termed the point of saturation, and it is then said that the nitric acid is saturated with lime.

SATUREI'A. (From *satyri*, the lustful satyrs, because it makes those who eat it lascivious. Blanch.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Gymnospermia*.

2. The pharmacopœial name of the summer savory.

SATUREI'A CAPITA'TA. The systematic name of the ciliated savory. *Thymus creticus*. It possesses similar virtues to our thyme, but in a stronger degree.

SATUREI'A HORTE'NSIS. The systematic name of the summer savory. *Satureia sativa*. *Culina sativa Plinii*. *Thymbra*. This low shrub is cultivated in our gardens for culinary purposes. It has a warm, aromatic, penetrating taste, and smells like thyme, but milder. It is an ingredient in most of the warm stews and made dishes.

SATUREI'A SATI'VA. See *Satureia*.

SATU'RNUS. (From the planet, or heathen god, of that name.) The chemical name of lead.

SATYRI'ASIS. (From *σατυρος*, a satyr, because they are said to be greatly addicted to venery. *Satyriasmus*. *Priapismus*. *Salacitas*. *Brachuna*. *Arascon*. Excessive and violent desire for coition in men. A genus of disease in the Class, *Locales*, and Order, *Dysorexiæ*, of Cullen.

SATY'RION. (From *σατυρος*, an animal given to venery, so called because it was supposed to excite venery if only held in the hand.) See *Orchis mascula*.

SATY'RIUM. See *Orchis mascula*.

Sauce alone. See *Erysimum alliaria*.

Saunders, red. See *Pterocarpus*.

Saunders, yellow. See *Santalum album*.

SAUR KRAUT. Sour crout. Cabbage preserved in brine. Antiscorbutic.

SAUVAGES, FRANCIS BOISSIER *de*, was born at Alais, in Lower Languedoc, in 1706. He graduated at Montpelier when only 20, but still continued his studies, and four years after went for farther improvement to Paris. On his return to Montpelier he obtained a professorship in 1734; but his reputation for ingenuity of speculation is said to have obstructed his success in practice. In 1752 he was made professor of botany, having for twelve years before officiated as demonstrator of the plants in the botanic garden. His death occurred in 1767. He was a member of several of the learned societies of Europe, and obtained the prizes given by many public bodies for the best essays on given subjects. Among his earlier publications was one, entitled "Nouvelles Classes des Maladies," the outline of the system of nosology, which has rendered his name illustrious, but which did not appear in its complete form, till after an additional labour of thirty years had been bestowed upon it. This work, consisting of five octavo volumes, contains an immense body of information, indeed almost every thing then known concerning the species of disease; but the whole is very loosely arranged. He had collected many new observations and descriptions, with a view to incorporate them in a second edition; which, however, he did not live to accomplish. These materials were used by Dr. Cramer after his death. Besides this valuable work, Sauvages was author of numerous others on different subjects relating to medicine.

Savin. See *Juniperus sabina*.

Savin ointment. See *Ceratum sabinæ*.

SAVI'NA. See *Juniperus sabina*.

Savoury. See *Satureia*.

SAXI'FRAGA. (From *saxum*, a stone, and *frango*, to break.) The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Digynia*.

SAXI'FRAGA A'LBA. See *Saxifraga granulata*.

Saxi'fraga a'nglica. See *Peucedanum.*

Saxi'fraga crassifo'lia. The root of this species of saxifrage is extolled by professor Pallas as an antiseptic.

Saxi'fraga granula'ta. The systematic name of the white saxifrage. *Saxifraga alba.* Called by Oribasius *Besto.* *Sanicula sedum.* White saxifrage. Linnæus describes the taste of this plant to be acrid and pungent, which we have not been able to discover: neither the tubercles of the root nor the leaves manifest to the organs of taste any quality likely to be of medicinal use, and therefore though this species of saxifrage has been long employed as a popular remedy in nephritic and gravelly disorders, yet we do not find, either from its sensible qualities, or from any published instances of its efficacy, that it deserves a place in the Materia Medica. The superstitious doctrine of signatures suggested the use of the root, which is a good example of what Linnæus has termed radix granulata. The bulbs, or tubercles of such roots answer an important purpose in vegetation, by supplying the plants with nourishment and moisture, and thereby enabling them to resist the effects of that drought to which the dry soils they inhabit peculiarly expose them.

Saxi'fraga ru'bra. See *Spiræa filipendula.*

Saxi'fraga vulga'ris. See *Peucedanum silaus.*

Saxifrage, burnet. See *Pimpinella saxifraga.*

Saxifrage, English. See *Peucedanum silaus.*

Saxifrage, meadow. See *Peucedanum silaus.*

Saxifrage, white. See *Saxifraga granulata.*

Scab. A hard substance covering superficial ulcerations, and formed by a concretion of the fluid discharged from them.

SCA'BIES. See *Psora.*

SCABIO'SA. (From *scaber*, rough; so called from its rough hairy surface.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetrandria.* Order, *Monogynia.*

2. The pharmacopœial name of the common scabious.

Scabio'sa arve'nsis. The systematic name of the common field scabious. This herb, (*Scabiosa, corollis quadrifidis radiantibus; foliis pinnatifidis, incisis; caule hispido,* of Linnæus,) and its flowers are sometimes used medicinally. The whole plant possesses a bitter and subadstringent taste, and was formerly much employed in the cure of some leprous affections and diseases of the lungs.

Scabio'sa succi'sa. The systematic name of the devil's bit scabious.

SCA'LA TYMPA'NI. The superior spiral cavity of the cochlea.

SCA'LA VESTI'BULI. The inferior spiral cavity of the cochlea.

Scald head. See *Tinea capitis.*

Scale. *Squama.* A lamina of morbid cuticle, hard, thickened, whitish, and opake, of a very small size and irregular, often increasing into layers, denominated crusts. Both scales and crusts repeatedly fall off, and are reproduced in a short time.

SCALE'NUS. (*Scalenus*, sc. *Musculus*; from σκαληνος, irregular, or unequal.) Anatomical writers have differed greatly in their descriptions of this muscle, which is situated at the side of the neck, between the transverse processes of the cervical vertebræ and the upper part of the thorax. The antients, who gave it its name from its resemblance to an irregular triangle considered it as one muscle. Vesalius and Winslow divide it into two, Fallopius and Cowper into three, Douglas into four, and Albinus into five portions, which they describe as distinct muscles. Without deviating in the least from anatomical accuracy, it may be considered as one muscle divided into three portions. The anterior portion arises commonly from the tranverse processes of the six inferior vertebræ of the neck, by as many short tendons, and descending obliquely outwards, is inserted tendinous and fleshy, into the upper side of the first rib, near its cartilage. The axillary artery passes through this portion, and sometimes divides it into two slips, about an inch and a half above its insertion. The middle portion arises by distinct tendons, from the transverse processes of the four last vertebræ of the neck, and descending obliquely outwards and a little backwards, is inserted tendinous into the outer and upper part of the first rib, from its root to within the distance of an inch from its cartilage. The space between this and the anterior portion, affords a passage to the nerves going to the upper extremities. It is in part covered by the third or posterior portion, which is the thinnest and longest of the three. This arises from the transverse processes of the second, third, fourth, and fifth vertebræ of the neck, by distinct tendons, and is inserted into the upper edge of the second rib, at the distance of about an inch and a half from its articulation, by a broad flat tendon. The use of the scalenus is to move the neck to one side, when it acts singly, or to bend it forwards, when both muscles act; and when the neck is fixed, it serves to elevate the ribs, and dilate the chest.

Scale'nus pri'mus. See *Scalenus.*

Scale'nus secu'ndus. See *Scalenus.*

Scale'nus te'rtius. See *Scalenus.*

SCALPE'LLUM. A scalpel or common dissecting knife. A raspatory.

Sca'lprum. A denticular raspatory, or rugire, used in trepanning.

SCAMMO'NIUM. (A corruption of the Arabian word *chamozah.*) See *Convolvulus scammonia.*

Scammony. See *Convolvulus scammonia.*

SCA'NDIX. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

Sca'ndix cerefo'lium. The systematic name of the officinal chervil. *Cerefolium. Chærophyllum. Chærefolium.* Chervil. This plant, *Scandix seminibus nitidis, ovato-subulatis; umbellis sessilibus, lateralibus,* of Linnæus, is a salubrious culinary herb, sufficiently grateful both to the palate and stomach, slightly aromatic, gently aperient, and diuretic.

Sca'ndix odo'rata. The systematic name of the sweet cicely, which possesses virtues similar to the common chervil. See *Scandix cerefolium.*

SCA'PHA. (A skiff, or cock-boat; from σκαπτω, to make hollow; because formerly they were made by excavating a large tree.)

1. The excavation or cavity of the auricula, or external ear, between the helix and antihelix.

2. The name of a double-headed roller.

Scaphoid. See *Scaphoides.*

SCAPHOI'DES. (From σκαφη, a little vessel, or boat, and ειδος, resemblance.) Boat-like. See *Naviculare os.*

SCA'PULA. (From the Hebrew *schipha.*) *Omoplata. Os homoplatæ. Scoptula. Epinotion.* The shoulder-blade. This bone, which approaches nearly to a triangular figure, is fixed, not unlike a buckler, to the upper, posterior, and lateral part of the thorax, extending from the first to about the seventh rib. The anterior and internal surface is irregularly concave, from the impression, not of the ribs, as the generality of anatomists have supposed, but of the subscapularis muscle. Its posterior and external surface is convex, and divided into two unequal fossæ by a considerable spine, which, rising small from the posterior edge of the scapula, becomes gradually higher and broader, as it approaches the anterior and superior angle of the bone, till at length it terminates in a broad and flat process, at the top of the shoulder, called the *processus acromion.* On the anterior edge of this processus acromion, we observe an oblong, concave, articulating surface, covered with cartilage, for the articulation of the scapula with the clavicle. At its lower part, the acromion is hollowed, to allow a passage to the supra and infra spinati muscles. The ridge of the spine affords two rough, flat surfaces, for the insertion of the trapezius and deltoid muscles. Of the two fossæ into which the external surface of the bone is divided by the spine, the superior one, which is the smallest, serves to lodge the supra spinatus muscle; and the inferior fossa, which is much larger than the other, gives origin to the infra spinatus. The triangular shape of the scapula leads us to consider its angles and its sides. The upper posterior angle is neither so thick, nor has so rough a surface, as the inferior one; but the most remarkable of the three angles of this bone is the anterior one, which is of great thickness, and formed into a glenoid cavity of an oval shape, the greatest diameter of which is from below upwards. This cavity, in the recent subject is furnished with cartilage, and receives the head of the os humeri. The cartilaginous crust, which surrounds its brims, makes it appear deeper in the fresh subject than in the skeleton. A little beyond this glenoid cavity, the bone becomes narrower, so as to give the appearance of a neck: and above this rises a considerable process, which, from being thick at its origin, becomes thinner, and, in some degree, flattened at its extremity. This process projects considerably, and is curved downwards. From its supposed resemblance to the beak of a bird, it is called the *coracoid* process. From the whole external side of this process, a strong and broad ligament is stretched to the processus acromion, becoming narrower as it approaches the latter process, so as to be of a somewhat triangular shape. This ligament, and the two processes with which it is connected, are evidently intended for the protection of the joint, and to prevent a luxation of the os humeri upwards. Of the three sides of the scapula, the posterior one, which is the longest, is called the *basis.* This side is turned towards the vertebræ. Its other two sides are called *costæ.* The superior costa, which is the upper and shortest side, is likewise thinner than the other two, having a sharp edge. It is nearly horizontal, and parallel with the second rib; and is interrupted near the basis of the coracoid process, by a semicircular niche, which is closed by a ligament that extends from one end of it to the other, and affords a passage to vessels and nerves. Besides this passage, there are other niches in the scapula for the transmission of vessels; viz. one between the coracoid process and the head of the bone, and another between its neck and the processus acromion. The third side of the scapula, or the inferior costa, as it is called, is of considerable thickness, and extends obliquely from the neck of the bone to its inferior angle, reaching from about the third to the eighth rib. The scapula has but very little cellular substance, and is of unequal thickness, being very thin at its middle part, where it is covered by a great number of muscles, and having its neck, the acromion, and coracoid process, of considerable strength. In the fœtus, the basis and the neck of the scapula, together with its glenoid cavity, acromion, coracoid process, and the ridge of the spine, are so many epiphyses with respect to the rest of the bone, to which they are not completely united till a considerable time after birth. The scapula is articulated to the clavicle and os humeri, to which last it serves as a fulcrum; and, by altering its position, it affords a greater scope to the bones of the arm in their different motions. It likewise affords attachment to a great number of muscles, and posteriorly serves as a defence to the thorax.

SCAPULA'RIA. (From *scapula*, the shoulder-bone.) A bandage for the shoulder-blade.

SCAPULA'RIÆ ARTE'RIÆ and VENÆ. The scapulary arteries and veins are branches of the subclavian and axillary.

SCARBOROUGH, Sir CHARLES, was born about the year 1616. Intending to follow the medical profession, he went to study at Cambridge, and applied himself particularly to the mathematics, in which he made great proficiency. During the civil wars he was obliged to remove to Oxford, where he entered under the celebrated Harvey, then warden of Merton College, who being employed in writing his treatise "De Generatione Animalium," gladly accepted the assistance of Mr. Scarborough. Upon taking the degree of doctor of medicine, he settled in the metropolis, where he practised with great reputation. He became a fellow of the college of physicians, in which he was much respected for his talents; and being appointed to introduce the Marquis of Dorchester, who was admitted into that body in 1658, he made an elegant Latin speech on that occasion. In the mean time he began to deliver anatomical lectures at Surgeons' Hall, which were highly approved, and continued for sixteen or seventeen years. In 1669 the order of knighthood was conferred upon him by Charles II., who also appointed him his chief physician; and he enjoyed the same office under the two succeeding monarchs. He was likewise made physician to the Tower of London, which appointment he retained till his death about the year 1702. The works left by him were chiefly mathematical.

SCARBOROUGH WATER. A ferruginous spring at Scarborough, in Yorkshire. There are two species of chalybeate water found in this spot, and they differ considerably in their composition, though they rise nearly contiguous to each other. The one is a simple carbonated chalybeate, similar to the Tunbridge water; the other, which is better known and more frequented, and more particularly distinguished as Scarborough water, has, in conjunction with the iron, a considerable admixture of a purging salt, which adds much to its value. The diseases in which it is ordered are similar to those in which Cheltenham water is prescribed, only it is necessary to increase the purgative effect of this water by adding similar salts. It is, therefore, chiefly as an alterative that this water can be employed in its natural state.

Scarborough has an advantage belonging to its situation which Cheltenham does not possess, that of affording an opportunity for sea-bathing, the use of which will, in many cases, much assist in the plan of cure for many of the disorders for which the mineral water is resorted to.

Scarf-skin. See *Cuticle* and *Skin.*

SCARIFICATION. (*Scarificatio*, from *scarifico*, to scarify.) A superficial incision made with a lancet, or a chirurgical instrument called a scarificator, for the purpose of taking away blood, or letting out fluids, &c.

SCARI'OLA. See *Lactuca scariola.*

SCARI'OLA GALLO'RUM. The lactuca scariola is sometimes so termed. See *Lactuca scariola.*

SCARLATI'NA. (From *scarlatto*, a deep red. Ital.) The scarlet fever, a genus of disease in the Class, *Pyrexiæ*, and Order, *Exanthemata*, of Cullen; characterized by contagious synocha; the fourth day the face swells; a scarlet eruption appears on the skin in patches; which, after three or four days, ends in the desquamation of the cuticle, and is often succeeded by anasarca. It has two species: 1. *Scarlatina simplex*, the mild. 2. *Scarlatina cynanchica*, or *anginosa*, with ulcerated sore throat. Dr. Willan has added to these a third, called *maligna*, agreeing with the cynanche maligna, of Cullen.

Some have asserted that scarlatina never attacks the same person a second time; more extensive observation has confuted this opinion.

Scarlatina attacks persons of all ages, but children and young persons are most subject to it, and it appears at all seasons of the year; but it is more frequently met with towards the end of autumn, or beginning of winter, than at any other periods, at which time it very often becomes a prevalent epidemic. It is, beyond all doubt, a very contagious disease.

The one to which it bears the greatest resemblance is the measles; but from this it is readily to be distinguished by the absence of the cough, watery eye, running at the nose and sneezing, which are the predominant symptoms in the early stage of the measles, but which do not usually attend on the scarlatina, or at least in any high degree.

It begins like other fevers, with languor, lassitude, confusion of ideas, chills, and shiverings, alternated by fits of heat. The thirst is considerable, the skin dry, and the patient is often incommoded with anxiety, nausea, and vomiting.

About the third day, the scarlet efflorescence appears on the skin, which seldom produces however any remission of the fever.

On the departure of the efflorescence, which usually continues out only for three or four days, a gentle sweat comes on, the fever subsides, the cuticle or scarf-skin then falls off in small scales, and the patient gradually regains his former strength and health.

On the disappearance of the efflorescence in scarlatina, it is, however, no uncommon occurrence for an anasarcous swelling to affect the whole body, but this is usually of a very short continuance.

Scarlatina anginosa, in several instances, approaches very near to the malignant form, the patient is seized not only with a coldness and shivering, but likewise with great languor, debility, and sickness, succeeded by heat, nausea, vomiting of bilious matter, soreness of the throat, inflammation, and ulceration in the tonsils, &c. a frequent and laborious breathing, and a quick and small depressed pulse. When the efflorescence appears, which is usually on the third day, it brings no relief, on the contrary, the symptoms are much aggravated, and fresh ones arise.

In the progress of the disease, one universal redness, unattended however by any pustular eruption, pervades the face, body, and limbs, which parts appear somewhat swollen. The eyes and nostrils partake likewise more or less of the redness, and in proportion as the former have an inflamed appearance, so does the tendency to delirium prevail.

On the first attack, the fauces are often much inflamed, but this is usually soon succeeded by greyish sloughs, which give the parts a speckled appearance, and render the breath more or less fœtid. The patient is often cut off in a few days: and even if he recovers, it will be by slow degrees, dropsical swellings, or tumours of the parotid, and other glands, slowly suppurating, being very apt to follow. In the malignant form of the disease the symptoms at first are pretty much the same; but some of the following peculiarities are afterwards observable. The pulse is small, indistinct, and irregular; the tongue, teeth, and lips, covered with a brown or black incrustation; a dull redness of the eyes, with a dark-red flushing of the cheeks, deafness, delirium, or coma; the breath is extremely fœtid; the respiration rattling and laborious, partly from viscid phlegm clogging the fauces; the deglutition is constricted and painful; and there is a fulness and livid colour of the neck, with retraction of the head. Ulcerations are observed on the tonsils and adjoining parts, covered with dark sloughs, and surrounded by a livid base; and the tongue is often so tender as to be excoriated by the slightest touch. An acrid discharge flows from the nostrils, causing soreness, or chaps, nay even blisters, about the nose and lips; the fluid discharged being at first thin, but afterwards thick and yellowish. The rash is usually faint, except in a few irregular patches; and it presently changes to a dark, or livid red colour: it appears late, is very uncertain in its duration, and often intermixed with petechiæ: it sometimes disappears suddenly a few hours after it is formed, and comes out again at the expiration of two or three days. In an advanced stage of the disease, where petechiæ, and other symptoms characteristic of putrescency, are present, hæmorrhages frequently break forth from the nose, mouth, and other parts.

When scarlatina is to terminate in health, the fiery redness abates gradually, and is succeeded by a brown colour, the skin becomes rough, and peels off in small scales, the tumefaction subsides, and health is gradually restored. On the contrary, when it is to terminate fatally, the febrile symptoms run very high from the first of its attack, the skin is intensely hot and dry, the pulse is very frequent but small, great thirst prevails, the breath is very fœtid, the efflorescence makes its appearance on the second day, or sooner, and about the third or fourth is probably interspersed with large livid spots, and a high degree of delirium ensuing, or hæmorrhages breaking out, the patient is cut off about the sixth or eighth day. In some cases a severe purging arises, which never fails to prove fatal. Some again, where the symptoms do not run so high, instead of recovering, as is usual, about the time the skin begins to regain its natural colour, become dropsical, fall into a kind of lingering way, and are carried off in the course of a few weeks.

Scarlatina in its inflammatory form is not usually attended with danger, although a considerable degree of delirium sometimes prevails for a day or two; but when it partakes much of the malignant character, or degenerates into typhus putrida, which it is apt to do, it often proves fatal. On dissection of those who die of this disease, the fauces are inflamed, suppurated and gangrenous; and the trachea and larynx are likewise in a state of inflammation, and lined with a viscid fœtid matter. In many instances, the inflammatory affection extends to the lungs themselves. Large swellings of the lymphatic glands about the neck, occasioned by an absorption of the acrid matter poured out in the fauces, are now and then to be found. The same morbid appearances which are to be met with in putrid fever, present themselves in other parts of the body.

The plan to be pursued will differ according to the form of the disease. In the scarlatina simplex little is required, except clearing the bowels, and observing the antiphlogistic regimen. But where the throat is affected, and the fever runs higher, more active means become necessary, varying according to the type of this, whether synochal, or typhoid. In general we may begin by exhibiting a nauseating emetic, which besides its effect on the fever, may be useful in checking inflammation in the throat; and occasionally the repetition of such a remedy after a time, may answer a good purpose: but commonly it will be better to follow up the first by some cathartic remedy of sufficient activity. Then, so long as the strength will allow, we may endeavour to moderate the fever by mercurial and antimonial preparations, or other medicines promoting the several secretions, by steadily pursuing the antiphlogistic regimen, and occasionally applying cold water to the skin, when this is very hot and dry. Sometimes severe inflammation in the throat at an early period may render it adviseable to apply a few leeches externally, or blisters behind the ears; and gargles of nitrate of potash, the mineral acids, &c. should be used from time to time. But where the disorder exhibits the typhoid character, with ulcers in the throat, tending perhaps to gangrene, it is necessary to support the system by a nutritious diet, with a moderate quantity of wine, and tonic or stimulant medicines, as the cinchona, calumba, ammonia, capsicum, &c.; the acids will also be very proper from their antiseptic, as well as tonic power; and stimulant antiseptic gargles should be frequently employed, as the mineral acids sufficiently diluted, with the addition of tincture of myrrh, or these mixed with decoction of bark, &c. Besides the general measures, thus varied according to the character of the disease, particular alarming symptoms may require to be palliated; as vomiting, by the effervescing draught, and occasionally a blister to the stomach, if there be tenderness on pressure; diarrhœa by small doses of opium, &c. The management of these, however, as well as of the dropsical swellings, and other sequels of the disease, will be understood from what is said under those heads respectively.

Scarlati'na angino'sa. See *Scarlatina.*

Scarlati'na cyna'nchica. See *Scarlatina.*

Scarlati'na si'mplex. See *Scarlatina.*

Scarlet fever. See *Scarlatina.*

Sceleton. See *Skeleton.*

Sceloty'rbe. (From σκελος, the leg, and τυρϐη, riot, intemperance.) A debility of the legs from scurvy or an intemperate way of life.

SCHERO'MA. A dryness of the eye from the want of the lachrymal fluid. The effects of this lachrymal fluid being deficient are, the eyes become dry, and in their motions produce a sensation as though sand, or some gritty substances, were between the eye and the eyelid; the vision is obscured, the globe of the eye appears foulish and dull, which is a bad omen in acute diseases. The species are, 1. *Scheroma febrile*, or a dryness of the eyes, which is observed in fevers complicated with a phlogistic density of the humours. 2. *Scheroma exhaustorum*, which happens after great evacuations, and in persons dying. 3. *Scheroma inflammatorum*, which is a symptom of the ophthalmia sicca. 4. *Scheroma itinerantium*, or the dryness of the eyes, which happens in sandy places to travellers, as in hot Syria, or from dry winds, which dry up the humidity necessary for the motion of the eyes.

Schidace'don. (From σχιδαξ, a splinter.) A longitudinal fracture of the bone.

Schinelæ'um. (From σχινος, mastich, and ελαιον, oil.) Oil of mastich.

SCHNEIDER, Conrad Victor, was born at Bitterfeld in Misnia. He filled the offices of professor of anatomy botany, and medicine, at Wittemberg, with great reputation: and was father of the faculty when he died in 1680. He wrote many treatises; those on anatomical subjects relating chiefly to the bones of the cranium, and to the pituitary membrane of the nostrils, to which his name is still attached. He refuted an ancient error, that the mucus in catarrh distilled through the cribriform bone from the brain, showing that it was secreted by the pituitary membrane. In other respects his writings, except in anatomy, are diffuse and obscure, and full of antient hypothetical doctrines.

SCHNEIDER'S MEMBRANE. The very vascular pituitary membrane of the nose, called Schneiderian, from its discoverer.

Schoena'nthus. (From σχοινος, a rush, and ανθος, a flower.) Sweet rush, or camel's hay. See *Andropogon schœnanthus.*

Schœnolagu'rus. (From σχοινος, a rush, λαγως, a hare, and ουρα, a tail; so called from its resemblance to a hare's-tail.) Hare's-tail. Cotton-grass.

SCIATIC ARTERY. *Arteria sciatica.* Ischiatic artery. A branch of the internal iliac.

SCIATIC NERVE. *Nervus sciaticus.* Ischiatic nerve. A branch of a nerve of the lower extremity, formed by the union of the lumbar and sacral nerves. It is divided near the popliteal cavity into the tibial and peroneal, which are distributed to the leg and foot.

SCIATIC NOTCH. Ischiatic notch. See *Innominatum os.*

SCIATIC VEIN. *Vena sciatica.* The vein which accompanies the sciatic artery in the thigh.

SCIA'TICA. *Ischias.* A rheumatic affection of the hip-joint.

Sciatica cresses. The iberis or cardamantica, raised in gardens for culinary purposes.

SCI'LLA. (From σκιλλω, to dry; so called from its property of drying up humours.)

1. The name of a genus of plants in the Linnæan system. Class, *Hexandria.* Order, *Monogynia.*

2. The pharmacopœial name of the medicinal squill. See *Scilla maritima*.

Sci′lla exsicca′ta. Dried squill.

Sci′lla hispa′nica. The Spanish squill.

Sci′lla mari′tima. The systematic name of the officinal squill. *Ornithogalum maritimum. Squilla. Scilla maritima, nudiflora, bracteis refractis,* of Linnæus. A native of Spain, Sicily, and Syria, growing on the sea-coast. The red-rooted variety has been supposed to be more efficacious than the white, and is therefore still preferred for medicinal use. The root of the squill, which appears to have been known as a medicine in the early ages of Greece, and has so well maintained its character ever since as to be deservedly in great estimation, and of very frequent use at this time, seems to manifest a poisonous quality to several animals. In proof of this, we have the testimonies of Hillefield, Bergius, Vogel, and others. Its acrimony is so great, that even if much handled it exulcerates the skin, and if given in large doses, and frequently repeated, it not only excites nausea, tormina, and violent vomiting, but it has been known to produce strangury, bloody urine, hypercatharsis, cardialgia, hæmorrhoids, convulsions, with fatal inflammation, and gangrene of the stomach and bowels. But as many of the active articles of the Materia Medica, by injudicious administration, become equally deleterious, these effects of the scilla do not derogate from its medicinal virtues; on the contrary, we feel ourselves fully warranted, says Dr. Woodville, in representing this drug, under proper management, and in certain cases and constitutions, to be a medicine of great practical utility, and real importance in the cure of many obstinate diseases. Its effects, as stated by Bergius, are incidens, diuretica, emetica, subpurgans, hydragoga, expectorans, emmenagoga. In dropsical cases it has long been esteemed the most certain and effectual diuretic with which we are acquainted; and in asthmatic affections, or dyspnœa, occasioned by the lodgment of tenacious phlegm, it has been the expectorant usually employed. The squill, especially in large doses, is apt to stimulate the stomach, and to prove emetic; and it sometimes acts on the intestines, and becomes purgative; but when these operations take place, the medicine is prevented from reaching the blood vessels and kidneys, and the patient is deprived of its diuretic effects, which are to be obtained by giving the squill in smaller doses, repeated at more distant intervals, or by the joining of an opiate to this medicine, which was found by Dr. Cullen to answer the same purpose. The doctor further observes, that from a continued repetition of the squill, the dose may be gradually increased, and the interval of its exhibitions shortened; and when in this way the dose comes to be tolerably large, the opiate may be most conveniently employed to direct the operation of the squill more certainly to the kidneys. "In cases of dropsy, that is, when there is an effusion of water into the cavities, and therefore less water goes to the kidneys, we are of opinion that neutral salt, accompanying the squill, may be of use in determining this fluid more certainly to the kidneys; and whenever it can be perceived that it take this course, we are persuaded that it will be always useful, and generally safe, during the exhibition of the squills, to increase the usual quantity of drink."

The diuretic effects of squills have been supposed to be promoted by the addition of some mercurial; and the less purgative preparations of mercury, in the opinion of Dr. Cullen, are best adapted to this purpose; he therefore recommends a solution of corrosive sublimate, as being more proper than any other, because most diuretic. Where the primæ viæ abound with mucous matter, and the lungs are oppressed with viscid phlegm, this medicine is likewise in general estimation.

As an expectorant, the squill may be supposed not only to attenuate the mucus in the follicles, but also to excite a more copious secretion of it from the lungs, and thereby lessen the congestion, upon which the difficulty of respiration very generally depends. Therefore in all pulmonic affections, excepting only those of actual or violent inflammation, ulcer, and spasm, the squill has been experienced to be an useful medicine. The officinal preparations of squills are, a conserve, dried squills, a syrup, and vinegar, an oxymel, and pills. Practitioners have not, however, confined themselves to these. When this root was intended as a diuretic, it has most commonly been used in powder, as being in this state less disposed to nauseate the stomach; and to the powder it has been the practice to add neutral salts, as nitre, or crystals of tartar, especially if the patient complained of much thirst; others recommend calomel; and with a view to render the squills less offensive to the stomach, it has been usual to conjoin an aromatic. The dose of dried squills is from one to four or six grains once a day, or half this quantity twice a-day; afterwards to be regulated according to its effects. The dose of the other preparations of this drug, when fresh, should be five times this weight; for this root loses in the process of drying four-fifths of its original weight, and this loss is merely a watery exhalation.

Sci′llæ ace′tum. Squills macerated in vinegar.

Sci′llæ conse′rva. Squills beat up with sugar.

Sci′llæ mel. Tincture of squills boiled with honey.

Sci′llæ o′xymel. Vinegar of squills boiled with honey.

Sci′llæ pi′lulæ. Squill pills, consisting of dried squills, ginger, soap, and ammoniacum.

Sci′llæ tinctu′ra. Squills digested in spirit of wine.

Scilli′tes. (From σκιλλα, the squill.) A wine impregnated with squills.

Sci′ncus. (From *sheque*, Heb.) The skink. This amphibious animal is of the lizard kind, and caught about the Nile, and thence brought dried into this country, remarkably smooth and glossy, as if varnished. The flesh of the animal, particularly of the belly, has been said to be diuretic, alexipharmic, aphrodisiac, and useful in leprous disorders.

Scirrho′ma. (From σκιρροω, to harden.) *Scirrhosis.* A hard tumour. See *Scirrhus.*

SCI′RRHUS. (From σκιρροω, to harden.) A genus of disease in the Class, *Locales*, and Order, *Tumores*, of Cullen; known by a hard tumour of a glandular part, indolent, and not readily suppurating. The following observations of Mr. Pearson are deserving of attention. A scirrhus, he says, is usually defined to be a hard, and almost insensible tumour, commonly situated in a glandular part, and accompanied with little or no discolouration of the surface of the skin. This description agrees with the true or exquisite scirrhus; but when it has proceeded from the indolent to the malignant state, the tumour is then unequal in its figure, it becomes painful, the skin acquires a purple or livid hue, and the cutaneous veins are often varicose. Let us now examine whether this enumeration of symptoms be sufficiently accurate for practical purposes.

It is probable, that any gland in the living body may be the seat of a cancerous disease, but it appears more frequently as an idiopathic affection in those glands that form the several secretions than in the absorbent glands; and of the secreting organs, those which separate fluids that are to be employed in the animal economy, suffer much oftener than the glands which secrete the excrementitious parts of the blood. Indeed, it may be doubted whether an absorbent gland be ever the primary seat of a true scirrhus. Daily experience evinces, that these glands may suffer contamination from their connection with a cancerous part; but under such circumstances, this morbid alteration being the effect of a disease in that neighbouring part, it ought to be regarded as a secondary or consequent affection. I never yet met with an unequivocal proof of a primary scirrhus in an absorbent gland; and if a larger experience shall confirm this observation, and establish it as a general rule, it will afford material assistance in forming the diagnosis of this disease. The general term scirrhus hath been applied, with too little discrimination, to indurated tumours of lymphatic glands. When these appendages of the absorbent system enlarge in the early part of life, the disease is commonly treated as strumous; but as a similar alteration of these parts may, and often does occur at a more advanced period, there ought to be some very good reasons for ascribing malignity to one rather than the other. In old people the tumour is indeed often larger, more indurated, and less tractable than in children; but when the alteration originated in the lymphatic glands, it will very rarely be found to possess any thing cancerous in its nature.

If every other morbid alteration in a part were attended with pain and softness, then induration and defective sensibility might point out the presence of a scirrhus. But this is so far from being the case, that even encysted tumours, at their commencement, frequently excite the sensation of impenetrable hardness. All glands are contained in capsulæ, not very elastic, so that almost every species of chronic enlargement of these bodies must be hard; hence this induration is rather owing to the structure of the part, than to the peculiar nature of the disease; and as glands in their healthy state are not endowed with much sensibility, every disease that gradually produces induration, will rather diminish than increase their perceptive powers. Induration and insensibility may, therefore, prove that the affected part does not labour under an acute disease; but these symptoms alone can yield no certain information concerning the true nature of the morbid alteration. Those indolent affections of the glands that so frequently appear after the meridian of life, commonly manifest a hardness and want of sensation, not inferior to that which accompanies a true scirrhus; and yet these tumours will often admit of a cure by the same mode of treatment which we find to be successful in scrophula; and when they prove unconquerable by the powers of medicine, we generally see them continue stationary and innocent to the latest period of life. Writers have, indeed said much about certain tumours changing their nature, and assuming a new character; but I strongly suspect that the doctrine of the mutation of diseases into each other, stands upon a very uncertain foundation. Improper treatment may, without doubt, exasperate diseases, and render a complaint, which appeared to be mild and tractable, dangerous, or destructive; but to aggravate the symptoms, and to change the form of the disease, are things that ought not to be confounded. I do not affirm, that a breast which has been the seat of a mammary abscess, or a gland that has been affected with scrophula, may not become cancerous; for they might have suffered from this disease had no previous complaint existed; but these morbid alterations generate no greater tendency to cancer than if the parts had always retained their natural condition. There is no necessary connection between the cancer and any other disease, nor has it ever been clearly proved that one is convertible into the other.

Chirurgical writers have generally enumerated tumour as an essential symptom of the scirrhus; and it is very true, that this disease is often accompanied with an increase of bulk in the part affected. From long and careful observation, I am however induced to think, that an addition to the quantity of matter is rather an accidental than a necessary consequence of the presence of this peculiar affection.

When the breast is the seat of a scirrhus, the altered part is hard, perhaps unequal in its figure, and definite; but these symptoms are not always connected with an actual increase in the dimensions of the breast. On the contrary, the true scirrhus is frequently accompanied with a contraction and diminution of bulk, a retraction of the nipple, and a puckered state of the skin.

The irritation produced by an indurated substance lying in the breast, will very often cause a determination of blood to that organ, and a consequent enlargement of it; but I consider this as an inflammatory state of the surrounding parts, excited by the scirrhus, acting as a remote cause, and by no means essential to the original complaint. From the evident utility of topical blood-letting under these circumstances, a notion has prevailed that the scirrhus is an inflammatory disease; but the strongly-marked dissimilarity of a phlegmon and an exquisite scirrhus, in their appearances, progress, and mode of termination, obliges me to dissent from that opinion. That one portion of the breast may be in a scirrhous state, while the other parts are in a state of inflammation, is agreeable to reason and experience; but that an inflammation, which is an acute disease, and a scirrhus, whose essential characters are almost directly the reverse of inflammation, shall be co-existent in the same part, is not a very intelligible proposition. Tumour and inflammation are commonly met with on a variety of other occasions, and in this particular instance they may be the effects of the disease, but are not essentially connected with its presence.

An incipient scirrhus is seldom accompanied with a discolouration of the skin; and a dusky redness, purple, or even livid appearance of the surface, is commonly seen when there is a malignant scirrhus. The presence or absence of colour can, however, at the best, afford us but a very precarious criterion of the true nature of the complaint. When the disease is clearly known, an altered state of the skin may assist us in judging of the progress it has made; but as the skin may suffer similar variations in a number of very dissimilar diseases, it would be improper to found an opinion upon so delusive a phenomenon.

Scla′rea. (From *σκληρος*, hard; because its stalks are hard and dry, Blanch.) The garden clary. See *Salvia sclarea.*

Scla′rea hispa′nica. Wild clary, or horminum sylvestre.

Scleri′asis. (From *σκληροω*, to harden.) *Scleroma. Sclerosis.* A hard tumour or induration.

Sclerophtha′lmia, (From *σκληρος*, hard, and *οφθαλμος*, the eye.) A protrusion of the eye-ball. An inflammation of the eye, attended with hardness of the parts.

Sclerosarco′ma. (From *σκληρος*, hard, and *σαρκωμα*, a fleshy tumour.) A hard fleshy excrescence on the gums.

Sclero′sis. See *Scleriasis.*

SCLERO′TIC COAT. (*Tunica sclerotica;* from *σκληροω*, to harden; so called from its hardness.) *Sclerotis.* The outermost coat of the eye, of a white colour, dense, and tenacious. Its anterior part, which is transparent, is termed the *cornea transparens.* It is into this coat of the eye that the muscles of the bulb are inserted.

Sclero′tis. See *Sclerotic coat.*

Sclopeta′ria a′qua. (From *sclopetum*, a gun; so called from its supposed virtues in healing gun-shot wounds.) Arquebusade. It is made of sage, mugwort, and mint, distilled in wine.

Sclopetopla′ga. (From *sclopetum*, a gun, and *plaga*, a wound.) A gun-shot wound.

Scoli′asis. (From *σκολιοω*, to twist.) A distortion of the spine.

Scolope′ndria. The spleenwort, or miltwaste is sometimes so called. See *Ceterach.*

Scolope′ndrium. (From *σκολοπενδρα*, the earwig; so called because its leaves resemble the earwig.) See *Asplenium.*

Scolopomachæ′rium. (From *σκολωπαξ*, the woodcock, and *μαχαιρα*, a knife; so called because it is bent a little at the end like a woodcock's bill.) An incision-knife.

Sco′lymus. (From *σκολος*, a thorn; so named from its prickly leaves.) The artichoke is sometimes so called. See *Cinara.*

Sco′pa re′gia. The butcher's broom, or knee-holly, was formerly so termed. See *Ruscus.*

Scorbu′tia. (From *scorbutus*, the scurvy.) Medicines for the scurvy.

SCORBUTUS. (From *schorboet*, Germ.) *Gingibrachium*, because the gums and arms, and *gingipedium*, because the gums and legs, are affected by it. The scurvy. A genus of disease in the Class, *Cachexiæ*, and Order, *Impetigines*, of Cullen; characterized by extreme debility; complexion pale and bloated; spongy gums; livid spots on the skin; breath offensive; œdematous swellings in the legs; hæmorrhages; foul ulcers; fœtid urine; and extremely offensive stools. The scurvy is a disease of a putrid nature, much more prevalent in cold climates than in warm ones, and which chiefly affects sailors, and such as are shut up in besieged places, owing, as is supposed, to their being deprived of fresh provisions, and a due quantity of acescent food, assisted by the prevalence of cold and moisture, and by such other causes as depress the nervous energy, as indolence, confinement, want of exercise, neglect of cleanliness, much labour and fatigue, sadness, despondency, &c. These several debilitating causes, with the concurrence of a diet consisting principally of salted or putrescent food, will be sure to produce this disease. It seems, however, to depend more on a defect of nourishment, than on a vitiated state; and the reason that salted provisions are so productive of the scurvy, is, most probably, because they are drained of their nutritious juices, which are extracted and run off in brine. As the disease is apt to become pretty general amongst the crew of a ship when it has once made its appearance, it has been supposed by many to be of a contagious nature; but the conjecture seems by no means well founded.

A preternatural saline state of the blood has been assigned as its proximate cause. It has been contended by some physicians, that the primary morbid affection in this disease is a debilitated state of the solids, arising principally from the want of aliment.

The scurvy comes on gradually, with heaviness, weariness, and unwillingness to move about, together with dejection of spirits, considerable loss of strength, and debility. As it advances in its progress, the countenance becomes sallow and bloated, respiration is hurried on the least motion, the teeth become loose, the gums are spongy, the breath is very offensive, livid spots appear on different parts of the body, old wounds which have been long healed up break out afresh, severe wandering pains are felt, particularly by night, the skin is dry, the urine small in quantity, turning blue vegetable infusions of a green colour; and the pulse is small, frequent, and, towards the last, intermitting; but the intellects are, for the most part, clear, and distinct.

By an aggravation of the symptoms, the disease, in its last stage, exhibits a most wretched appearance. The joints become swelled and stiff, the tendons of the legs are rigid and contracted, general emaciation ensues, hæmorrhages break forth from different parts, fœtid evacuations are discharged by stool, and a diarrhœa or dysentery arises, which soon terminates the tragic scene.

Scurvy, as usually met with on shore, or where the person has not been exposed to the influence of the remote causes before enumerated, is unattended by any violent symptoms, as slight blotches, with scaly eruptions on different parts of the body, and a sponginess of the gums, are the chief ones to be observed.

In forming our judgment as to the event of the disease, we are to be directed by the violence of the symptoms, by the situation of the patient with respect to a vegetable diet, or other proper substitutes, by his former state of health, and by his constitution not having been impaired by previous diseases.

Dissections of scurvy have always discovered the blood to be in a very dissolved state. The thorax usually contains more or less of a watery fluid, which, in many cases, possesses so high a degree of acrimony, as to excoriate the hands by coming in contact with it; the cavity of the abdomen contains the same kind of fluid; the lungs are black and putrid; and the heart itself has been found in a similar state, with its cavity filled with a corrupted fluid. In many instances, the epiphyses have been found divided from the bones, the cartilages separated from the ribs, and several of the bones themselves dissolved by caries. The brain seldom shows any marks of disease.

In the cure, as well as the prevention of scurvy, much more is to be done by regimen, than by medicines, obviating as far as possible the several remote causes of the disease, but particularly providing the patient with a more wholesome diet, and a large proportion of fresh vegetables; and it has been found that those articles are especially useful, which contain a native acid, as oranges, lemons, &c. Where these cannot be procured, various substitutes have been proposed, of which the best appear to be the inspissated juices of the same fruits, or the crystallized citric acid. Vinegar, sour crout, and farinaceous substances made to undergo the acetous fermentation, have likewise been used with much advantage: also brisk fermenting liquors, as spruce beer, cyder, and the like. Formerly many plants of the Class, *Tetradynamia*, as mustard, horse-radish, &c. likewise garlick, and others of a stimulant quality, promoting the secretions, were much relied upon, and, no doubt, proved useful to a certain extent. The spongy state of the gums may be remedied by washing the mouth with some of the mineral acids sufficiently diluted, or perhaps mixed with decoction of cinchona. The stiffness of the limbs by fomentations, cataplasms, and friction; and sometimes in hot climates, the earth-bath has afforded speedy relief to this symptom.

Sco'rdium. (From σκοροδον, garlic; so called because it smells like garlic.) See *Teucrium scordium*.

Sco'riæ. (*Scoria*, from σκω, excrement.) Dross. The refuse or useless parts of any substance.

Scorodopra'sum. (From σκοροδον, garlick, and πρασον, the leek.) The wild garlick or leek shalot.

Sco'rodum. (Απο του σκωρ οζειν, from its filthy smell.) Garlick.

Scorpi'aca. (From σκορπιος, a scorpion.) Medicines against the bite of serpents.

Scorpioi'des. (From σκορπιος, a scorpion, and ειδος, a likeness; so called because its leaves resemble the tail of a scorpion.) *Scorpiurus.* Scorpion-wort. Bird's-foot.

Scorpiu'rus. See *Scorpioides*.

SCORZONE'RA. (From *escorza*, a serpent, Span.; so called because it is said to be effectual against the bite of all venomous animals.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*.

2. The pharmacopœial name of the officinal viper grass.

Scorzone'ra hispa'nica. The systematic name of the esculent vipers' grass.

Scorzone'ra hu'milis. The systematic name of the officinal vipers' grass. *Escorzonera. Viperaria. Serpentaria hispanica.* Goat's grass. Vipers' grass. The roots of this plant, *Scorzonera humilis; caule subnudo, unifloro; foliis lato-lanceolatis, nervosis, planis*, of Linnæus, have been sometimes employed medicinally as alexipharmics, and in hypochondriacal disorders, and obstructions of the viscera. The *Scorzonera hispanica* mostly supplies the shops, whose root is esculent, oleraceous, and against diseases inefficacious.

Scotodi'ne. (From σκοτος, darkness, and δινος, a giddiness.) *Scotodinia. Scotodinos. Scotoma. Scotomia.* Giddiness, with impaired sight.

SCRIBONIUS, Largus, a Roman physician in the reign of Claudius, who wrote a treatise, "De Compositione Medicamentorum." Many of these formulæ are perfectly trifling and superstitious; and the whole work displays a great attachment to empiricism. The style is also very deficient in elegance for the time in which he lived, whence he appears to have been a person of inferior education.

SCROBI'CULUS CO'RDIS. (Dim. of *scrobs*, a ditch.) The pit of the stomach.

SCRO'FULA. (From *scrofa*, a swine; because this animal is said to be much subject to a similar disorder.) *Scrophula. Struma. Coiras. Chræas. Ecruelles*, Fr. Scrophula. The king's evil. A genus of disease in the Class, *Cachexiæ*, and Order, *Impetigines*, of Cullen. He distinguishes four species. 1. Scrophula vulgaris, when it is without other disorders external and permanent. 2. Scrophula mesenterica, when internal, with loss of appetite, pale countenance, swelling of the belly, and an unusual fœtor of the excrements. 3. Scrophula fugax. This is of the most simple kind; it is seated only about the neck, and for the most part is caused by absorption from sores on the head. 4. Scrophula Americana, when it is joined with the yaws. Scrophula consists in hard indolent tumours of the conglobate glands in various parts of the body; but particularly in the neck, behind the ears, and under the chin, which after a time suppurate and degenerate into ulcers, from which, instead of pus, a white curdled matter, somewhat resembling the coagulum of milk, is discharged.

The first appearance of the disease is most usually between the third and seventh year of the child's age; but it may arise at any period between this and the age of puberty; after which it seldom makes its first attack. It most commonly affects children of a lax habit, with smooth fine skins, fair hair, and rosy cheeks. It likewise is apt to attack such children as show a disposition to rachitis, marked by a protuberant forehead, enlarged joints, and a tumid abdomen. Like this disease, it seems to be peculiar to cold and variable climates, being rarely met with in warm ones. Scrophula is by no means a contagious disease, but, beyond all doubt, is of an hereditary nature, and is often entailed by parents on their children. There are, indeed, some practitioners who wholly deny that this, or any other disease, can be acquired by an hereditary right; but that a peculiar temperament of body, or predisposition in the constitution to some diseases, may extend from both father and mother to their offspring, is, observes Dr. Thomas, very clearly proved. For example, we very frequently meet with gout in young persons of both sexes, who could never have brought it on by intemperance, sensuality, or improper diet, but must have acquired the predisposition to it in this way.

Where there is any predisposition in the constitution to scrophula, and the person happens to contract a venereal taint, this frequently excites into action the causes of the former; as a venereal bubo not unfrequently becomes scrophulous, as soon as the virus is destroyed by mercury. The late Dr. Cullen supposed scrophula to depend upon a peculiar constitution of the lymphatic system. The attacks of the disease seem much affected or influenced by the periods of the seasons. They begin usually some time in the winter and spring, and often disappear, or are greatly amended, in summer and autumn. The first appearance of the disorder is commonly in that of small oval or spherical tumours under the skin, unattended by any pain or discolouration. These appear, in general, upon the sides of the neck, below the ear, or under the chin; but, in some cases, the joints of the elbows or ankles, or those of the fingers and toes, are the parts first affected. In these instances, we do not, however, find small moveable swellings; but, on the contrary, a tumour almost uniformly surrounding the joint, and interrupting its motion.

After some length of time the tumours become larger and more fixed, the skin which covers them acquires a purple or livid colour, and, being much inflamed, they at last suppurate and break into little holes, from which, at first, a matter somewhat puriform oozes out; but this changes by degrees into a kind of viscid serous discharge, much intermixed with small pieces of a white substance, resembling the curd of milk.

The tumours subside gradually, whilst the ulcers at the same time open more, and spread unequally in various directions. After a time, some of the ulcers heal; but other tumours quickly form in different parts of the body, and proceed on, in the same slow manner as the former ones, to suppuration. In this manner the disease goes on for some years, and appearing at last to have exhausted itself, all the ulcers heal up, without being succeeded by any fresh swellings; but leaving behind them an ugly puckering of the skin, and a scar of considerable extent. This is the most mild form under which scrophula ever appears. In more virulent cases, the eyes are particularly the seat of the disease, and are affected with ophthalmia, giving rise to ulcerations in the tarsi, and inflammation of the tunica adnata, terminating not unfrequently in an opacity of the transparent cornea.

In similar cases, the joints become affected, they swell and are incommoded by excruciating deep-seated pain, which is much increased upon the slightest motion. The swelling and pain continue to increase, the muscles of the limb become at length much wasted. Matter is soon afterwards formed, and this is discharged at small openings made by the bursting of the skin. Being, however, of a peculiar acrimonious nature, it erodes the ligaments and cartilages, and produces a caries of the neighbouring bones. By an absorption of the matter into the system, hectic fever at last arises, and, in the end, often proves fatal.

When scrophula is confined to the external surface, it is by no means attended with danger, although on leaving one part, it is apt to be renewed in others; but when the ulcers are imbued with a sharp acrimony, spread, erode, and become deep, without showing any disposition to heal; when deep-seated collections of matter form amongst the small bones of the hands and feet, or in the joints, or tubercles in the lungs, with hectic fever, arise, the consequences will be fatal.

On opening the bodies of persons who have died of this disease, many of the viscera are usually found in a diseased state, but more particularly the glands of the mesentery, which are not only much tumefied, but often ulcerated. The lungs are frequently discovered beset with a number of tubercles or cysts, which contain matter of various kinds. Scrophulous glands, on being examined by dissection, feel somewhat softer, to the touch than in their natural state, and when laid open, they are usually found to contain a soft curdy matter, mixed with pus. The treatment consists chiefly in the use of those means, which are calculated to improve the general health; a nutritious diet, easy of digestion, a pure dry air, gentle exercise, friction, cold bathing, especially in the sea, and strengthening medicines, as the preparations of iron, myrrh, &c. but, particularly the Peruvian bark with soda. Various mineral waters, and other remedies which moderately promote the secretions, appear also to have been often useful. In irritable states of the system, hemlock has been employed with much advantage. Mercury is generally injurious to scrofulous persons, when carried so far as to affect the mouth; yet they have sometimes improved under the use of the milder preparations of that metal, determined principally towards the skin. Moderate antimonials also, decoctions of sarsaparilla, mezereon, guaiacum, &c. burnt sponge, muriate of lime, and other such remedies have been serviceable in many cases, perhaps chiefly in the same way. The applications to scrofulous tumours and ulcers must vary according to the state of the parts, whether indolent, or irritable: where the tumours show no disposition to enlarge, or become inflamed, it is, perhaps, best to interfere little with them; but their inflammation must be checked by leeches, &c. and when ulcers exist, stimulant lotions or dressings must be used to give them a disposition to heal; but if they are in an irritable state, a cataplasm, made, perhaps, with hemlock, or other narcotic.

SCROPHULA'RIA. (From *scrofula*, the king's evil; so called from the unequal tubercles upon its roots, like scrofulous tumours.) The name of a genus of plants in the Linnæan system. Class, *Didynamia*. Order, *Angiospermia*. The fig-wort.

SCROPHULA'RIA AQUA'TICA. *Betonica aquatica.* Greater water-figwort. Water-betony. The leaves of this plant, *Scrophularia; foliis cordatis obtusis, petiolatis, decurrentibus; caule membranis angulato; racemis terminalibus*, of Linnæus, are celebrated as correctors of the ill flavour of senna. They were, also, formerly in high estimation against piles, tumours of a scrofulous nature, inflammations, &c.

Scrophula'ria mi'nor. The pile-wort is sometimes so called. See *Ranunculus ficaria.*

Scrophula'ria nodo'sa. The systematic name of the fig-wort. *Scrophularia vulgaris. Millemorbia. Scrophularia.* Common fig-wort or kernel-wort. The root and leaves of this plant, *Scrophularia ; foliis cordatis, trinervatis ; caule obtusangulo*, of Linnæus, have been celebrated both as an internal and external remedy against inflammations, the piles, scrophulous tumours and old ulcers ; but they are now only used in this country by the country people.

Scrophula'ria vulga'ris. See *Scrophularia nodosa.*

Scrotal hernia. *Hernia scrotalis, Scrotocele.* A protrusion of any part of an abdominal viscus or viscera into the scrotum. See *Hernia.*

Scrotoce'le. (From *scrotum*, and κηλη, a tumour.) A rupture or hernia in the scrotum.

SCRO'TUM. (*Quasi scortum*, a skin or hide.) *Bursa testium. Oscheus. Oscheon. Orchea*, of Galen. The common integuments which cover the testicles.

SCRU'PULUS. (Dim. of *scrupus*, a small stone.) A scruple or weight of 20 grains.

SCULTETUS, John, was born at Ulm in 1595, and, after the requisite studies, graduated at Padua. He then practised with considerable reputation in his native city, as well in surgery as in physic, and he appears to have been very bold in his operations. He was carried off by an apoplectic stroke in 1645. His principal work is entitled, "Armamentarium Chirurgicum," with plates of the instruments ; which was published after his death, and has passed through many editions, and been translated into most European languages.

SCURF. *Furfura.* Small exfoliations of the cuticle, which take place after some eruptions on the skin, a new cuticle being formed underneath during the exfoliation.

Scurvy. See *Scorbutus.*

Scurvy-grass. See *Cochlearia officinalis.*

Scurvy-grass, lemon. See *Cochlearia officinalis.*

Scurvy-grass, Scotch. See *Convolvulus soldanella.*

SCUTIFORM CARTILAGE. See *Thyroid cartilage.*

SCUTELLA'RIA. (From *scutella*, a small dish, or saucer, apparently in allusion to the little concave appendage which crowns the calyx.) Some have thought it to be more directly derived from *scutellum*, a little shield, to which they have compared the shield. The name of a genus of plants in the Linnæan system. Class, *Didynamia*, Order, *Gymnospermia.*

Scutella'ria galericula'ta. The systematic name of the skull-cap. *Tertianaria.* The *Scutellaria, foliis cordato-lanceolatis, crenatis ; floribus axillaribus*, of Linnæus, which is common in the hedges and ditches of this country. It has a bitter taste and a garlic smell, and is said to be serviceable against that species of ague which attacks the patient every other day.

SCY'BALA. Σκυβαλα. Dry hard excrements.

Scy'thicus. (From *Scythia*, its native soil.) An epithet of the liquorice-root or any thing brought from Scythia.

SEA-AIR is prescribed in a variety of complaints, being considered as more medicinal and salubrious than that on land, though not known to possess in its composition a greater quantity of oxygen. This is a most powerful and valuable remedy. It is resorted to with the happiest success against most cases of debility, and particularly against scrofulous diseases affecting the external parts of the body. See *Bath, cold.*

Sea-holly. See *Eryngium.*

Sea-moss. See *Fucus helminthocorton.*

Sea-oak. See *Fucus vesiculosus.*

Sea-onion. See *Scilla.*

Sea-salt. See *Sodæ murias.*

SEA-SICKNESS. A nausea or tendency to vomit, which varies, in respect of duration, in different persons upon their first going to sea. With some it continues only for a day or two ; while with others it remains throughout the voyage. The diseases in which sea-sickness is principally recommended are asthma and consumption.

SEA-WATER. This is arranged amongst the simple saline waters. Its chemical analysis gives a proportion of one of saline contents to about twenty-three and one-fourth of water ; but on our shores it is not greater than one of salt to about thirty of water. Sea-water on the British coast may, therefore be calculated to contain in the wine pint of muriated soda 186,5 grains, of muriated magnesia fifty-one, of selenite six grains ; total 243 one-half grains, or half an ounce and three and one half grains of saline contents. The disorders for which the internal use of sea-water has been and may be resorted to, are in general the same for which all the simple saline waters may be used. The peculiar power of sea-water and sea-salt as a discutient, employed either internally or externally in scrofulous habits, is well known, and is attended with considerable advantage when judiciously applied.

Sea-wrack. See *Fucus vesiculosus.*

Sealed earths. See *Sigillata terra.*

SEARCHING. The operation of introducing a metallic instrument through the urethra into the bladder, for the purpose of ascertaining whether the patient has the stone or not.

SEBACEOUS GLANDS. (*Glan-*

dulæ sebaceæ, from *sebum*, suet.) Glands which secrete a sebaceous or suety humour.

SEBADI′LLA. See *Cevadilla*.

SEBATE. (From *sebum*, suet.) *Sebas*. The name in the new chemistry of every compound of the acid of fat.

SEBE′STEN. (An Egyptian word.) See *Cordia myxa*.

SECA′LE. 1. The name of a genus of plants in the Linnæan system. Class, *Triandria*. Order, *Digynia*. Rye.

2. The common name of the seed of the *Secale cereale*, of Linnæus.

SECA′LE CEREA′LE. The systematic name of the rye-plant. It is principally used as an article of diet, and in the Northern countries of Europe is employed for affording an ardent spirit. See *Secale*.

SECONDARY. This term in general denotes something that acts as second or in subordination to another. Thus in diseases we have *secondary symptoms*.

SECONDARY FEVER. That febrile affection which arises after a crisis, or the discharge of some morbid matter, as after the declension of the small-pox or the measles.

SECRETION. The word secretion is used to express that function by which an organ separates from the blood the constituent parts of a fluid, that does not exist in it with its characteristic properties.

The difference of secreted humours is visibly connected with that of the organs employed for their formation. Thus arterial exhalation, that takes place throughout the whole extent of internal surfaces, to preserve their lubricity, affords nothing but an albuminous serosity, which is only the serum of the blood slightly altered by the weak action of organization very little complicated. The analysis of the water in dropsy, which is merely the serosity that continually transudes the surface of serous membranes, as the pleura or peritonæum, has demonstrated that this fluid has the greatest resemblance to the serum of the blood, and is only distinguished from it, by the variable proportions of albumen, and the different salts it contains in solution.

This first kind of secretion, this perspiratory transudation, would seem, then, to be a simple filtration or percolation of a liquor already formed in the blood through the porous parts of arteries; yet we must here acknowledge a peculiar action of membranes, the surface of which it perpetually lubricates; without this action the serum would remain united to the other constituent of the blood. This kind of action is termed exhalation. The distinguishable character of this kind of secretion is the absence of any mediate structure between the vas efferens and the excretory duct: the minute arteries and veins that run into the structure of membranes constitute both.

After serous transudation, requiring only a very simple organization, follows the secretion by cryptæ, glandular folicles, and mucous lacunæ. Each of these small glands contained in the texture of membranes lining the internal surface of the digestive, aerial, and urinary passages, and which, when conglomerated, form amygdalæ, &c. may be compared to a small bottle the bottom of which is round, and the neck short; the membranous parietes of these vesicular cryptæ are supplied with a great quantity of vessels and nerves. It is to the peculiar action of these that the secretion of mucus by these glands should be attributed. These mucous liquids are less fluid and more viscid than the fluid produced by the first kind of secretion, containing more albumen and salts; they are more different from the serum of the blood, and of a more excrementitious nature; the bottom of these bottle-kind of glands is turned towards the parts to which the mucous membrane adheres, their mouth or neck opens on the surface contiguous to these membranes.

The apertures by which the mucous glands discharge themselves are easy to be perceived on the tonsils, mucous surface of the urethra, rectum, &c.

Secretion and excretion are facilitated by the irritation occasioned by the presence of air, aliment, or urine; by the compression induced by them, and finally, by the peristaltic contractions of the muscular fibres to which mucous membranes adhere throughout the whole extent of the primæ viæ.

The fluids which are considerably different from the blood, require for their secretion organs of a more complicated structure; these are called conglomerate glands to distinguish them from lymphatic glands, which are named conglobate. These glands are visceral masses, formed by an assemblage of nerves and every species of vessels, disposed in packets, and united by cellular structure; a proper membrane, or an elongation of that which lines the cavity that includes them, surrounds their external surface, and separates them from the circumjacent parts.

The arteries do not form an immediate continuation with their excretory ducts, as Ruysch affirmed; nor do there exist intermediate glands between these vessels as Malpighi believed; it seems more probable that each gland has its cellular or parenchymatous substance in the areolæ, into which the arteries pour the materials of the fluid they prepare; in consequence of a power peculiar to them, and which forms their distinguishing character. Lymphatics and excretory ducts arise from the sides of these little cells, and both these species of vessels absorb; the latter attracts the secreted liquor, carrying it into receptacles, where it accumulates, while the former receive that part which the action of the organ could not completely elaborate, or the residue of the secretion.

The nerves which always enter more or less into the structure of secretory organs, and come principally from the great sympathetics, terminate variously in their substance, and furnish each of them with a particular sensibility, by means of which they distinguish, in the blood brought thither by the vessels, the constituent parts or materials of the humour they are destined to prepare, and select it by a real preference. Besides they cause them to take on a peculiar mode of activity, the exercise of which causes these separate elements to undergo a certain composition, and impresses the fluid produced with specific properties, always relative to the mode of action of which they are the result. Thus the liver retains the constituent principles of bile contained in the blood of the vena portæ, elaborates, combines them, and forms the bile, an animal fluid, distinguishable by certain characteristic properties that are subject to variation according as the blood contains the elements which enter into its composition in a greater or less degree; according to the increased or diminished disposition of the gland to retain them, and to effect a more or less complete mixture of them. The qualities of the bile dependent on the concurrence of all these circumstances, should present so many differences as the blood contains principles, and as the hepatic organ may offer varieties relative to the composition of the former, and degree of activity of the latter. Hence arise alterations of the bile, the most inconsiderable of which being compatible with health, escape observation, while those which are more complete, and derange the natural order of the functions, become evident by diseases of which they may be sometimes considered the effect, and at other times the cause. These alterations of the bile (and what is here said of the secretion of this humour may extend to almost every other secretion of the animal economy) never extend so far as to prevent it from being distinguished; it always preserves in a greater or less degree its essential and primitive characters, it never acquires the qualities of another liquor so as to resemble serum, urine, or saliva, &c.

The action of secretory glands is not continual, most of them are subject to the alternate state of action and rest; all, as Barden observed, are asleep or awake when any irritation operates on them, or in their vicinity, and determines their immediate or sympathetic action. Thus saliva is secreted in greater quantity during mastication, &c.

When a secretory organ enters into action, the surrounding parts, or such as are situated in its vicinity, usually sympathise; for instance, the liver is comprised in the sphere of action of the duodenum, since the repletion of this intestine irritates it, determines a more abundant afflux of humours, and a more copious secretion of bile.

The blood conveyed to a secretory gland, before it arrives there, suffers preparatory changes which dispose it to furnish the constituents of the liquor about to be secreted.

The celerity with which the blood arrives at an organ, and the length, diameter, angles of the vessels, and the disposition of their ultimate ramifications, are all circumstances which ought to be observed in the examination of each secretion, since they have an influence on the nature of the secreted fluid, and on the mode in which secretion is effected. When a gland is irritated it becomes the centre of fluxion, and acts on the blood brought by its vessels. Secretion dependant on a peculiar action inherent in a glandular organ is assisted by the action of surrounding muscles.

The glands, after having remained for a longer or shorter time in a state of excitation, relax, become collapsed, and fluids are not conveyed to them in such abundance, they remain in a state of sleep, and during repose renew their sensibility, which is consumed by long exertion.

A remarkable circumstance in secretions is, that they mutually replace and supply each other, so that when the urine is less copious, perspiration is more abundant. A sudden coldness of the skin frequently occasions diarrhœas, the humours are immediately repelled towards the intestinal tube, and pass off by the mucous glands of the intestines, the action of which is considerably increased.

SE′CTIO CÆSA′REA. See *Cæsarian operation.*

SE′CTIO FRANCO′NIA. *Sectio hypogastrica.* The high operation for the stone. See *Lithotomy.*

SECUNDINES. The placenta and membranes which are expanded from its edge, and which form a complete involucrum of the fœtus and its waters, go under the common term of after-birth, or secundines.

The membranes of the ovum have usually been mentioned as two, the amnion and the chorion; and the latter has again been divided into the true and the false. The third membrane, (which, from its appearance, has likewise been called the villous or spongy, and from the consideration of it as the inner lamina of the uterus, cast off like the exuviæ of some animals, the decidua,) has been described by Harvey, not as one of the membranes of the ovum, but as a production of the uterus. The following is the order of the membranes of the ovum, at the full period of gestation: 1st, There is the outer or connecting, which is flocculent, spongy, and extremely vascular, completely investing the whole ovum, and lining the uterus. 2dly, The middle membrane, which is nearly pellucid, with a very few small blood-vessels scattered over it, and which forms a covering to the placenta and funis, but does not pass between the placenta and uterus. 3dly. The inner membrane, which is transparent, of a firmer texture than the others, and lines the whole ovum, making, like the middle membrane, a covering for the placenta and funis with the two last. The ovum is clothed when it passes from the ovarium into the uterus, where the first is provided for its reception.

These membranes, in the advanced state of pregnancy, cohere slightly to each other, though, in some ova, there is a considerable quantity of fluid collected between them, which, being discharged when one of the outer membranes is broken, forms one of the circumstances which have been distinguished by the name of, by or false waters.

Between the middle and inner membrane, upon or near the funis, there is a small, flat, and oblong body, which, in the early part of pregnancy, seems to be a vesicle containing milky lymph, which afterwards becomes of a firm, and apparently fatty texture. This is called the vesicula umbilicalis; but its use is not known. See *Placenta.*

Secu´ndum a´rtem. According to art. A term frequently used in prescription, and denoted by the letters S. A. which are usually affixed, when the making up of the recipe in perfection requires some uncommon care and dexterity.

Securi´daca. (From *securis*, an axe; so called because its leaves resemble a small axe.) Henbane.

SEDATIVES. (*Medicamenta sedativa*, from *Sedo*, to ease or assuage.) *Sedantia*, medicines which have the power of diminishing the animal energy, without destroying life. They are divided into *sedativa soporifica*, as opium, papaver, hyoscyamus, and *sedativa refrigerantia*, as neutral salts, acids, &c.

Sedative salt of Homberg. See *Boracic acid.*

Sedenta´ria o´ssa. The os coccygis and ischia.

Sedge. See *Iris pseudacorus.*

Sediment. The heavy parts of liquids, which fall to the bottom.

Sediment lateriticus. See *Lateritious sediment.*

SEDLITZ WATER. *Seydschutz water.* A simple saline mineral water. From chemical analysis it appears, that it is strongly impregnated with sulphate of magnesia or Epsom salt, and it is to this, along with probably the small quantity of muriate of magnesia, that it owes its bitter and saline taste, and its purgative properties. The diseases in which this water is recommended are, crudities of the stomach, hypochondriasis, amenorrhœa, and the anomalous complaints succeeding the cessation of the catamenia, œdematous tumours of the legs in literary men, hæmorrhoidal affections, and scorbutic eruptions.

SE´DUM. (From *sedo*, to assuage; so called because it allays inflammation.) The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Pentagynia.*

Se´dum a´cre. *Illecebra. Vermicularis. Piper murale. Sedum minus.* Wall-pepper. Stone-crop. The plant thus called is, in its recent state, extremely acrid, like the hydropiper; hence, if taken in large doses, it acts powerfully on the primæ viæ, proving both emetic and cathartic; applied to the skin as a cataplasm, it frequently produces vesications and erosions. Boerhaave, therefore, imagines that its internal employment must be unsafe; but experience has discovered, that a decoction of this plant is not only safe, but of great efficacy in scorbutic complaints. For which purpose, a handful of the herb is directed, by Below, to be boiled in eight pints of beer, till they are reduced to four, of which three or four ounces are to be taken every, or every other, morning. Milk has been found to answer this purpose better than beer. Not only ulcers simply scorbutic, but those of a scrophulous, or even cancerous tendency, have been cured by the use of this plant; of which Marquet relates several instances. He likewise found it useful as an external application in destroying fungous flesh, and in promoting a discharge in gangrenes and carbuncles. Another effect for which this plant is esteemed, is that of stopping intermittent fevers.

Se´dum lu´teum mura´le. Navel wort.

Se´dum ma´jus. See *Sempervivum tectorum.*

Se´dum mi´nus. See *Sedum acre.*

Se´dum tele´phium. The systematic name of the *orpine. Faba crassa. Telephium. Fabaria crassula. Anacampseros.* The plant which bears these names in various pharmacopœias, is the orpine, *Sedum foliis planiusculis serratis, corymbo folioso, caule erecto*, of Linnæus. It was formerly ranked as an antiphlogistic, but now forgotten.

SEEING. A sensation by which we perceive bodies around us, and their sensible qualities. The organ of sight is formed of three parts perfectly distinct; first, those which serve to protect the globe of the eye, to withdraw it suddenly from the influence of light, and to preserve it in a condition necessary for the exercise of its functions. These consist in the supercilia, palpebræ, and lachrymal passages, parts accessory to the organ. The eye-ball itself presents two portions very different from each other, one formed by almost the whole, and which may be called an optic instrument; the other, formed by a medullary expansion of the optic nerve is the immediate organ of sight; this is the retina, alone adapted to receive the impression of light, and to be affected by the delicate contact of this extremely subtle fluid. This impression, or sensation, is transmitted to the cerebral organ by the optic nerve, of which the retina is merely the expanded extremity.

The eye-brows, as being accessory organs to vision, have the effect of diminishing the effect of a too strong light by partly absorbing its rays. The supercilia answer this purpose better in proportion to the projection formed, and the darker colour of the hair; thus we knit the brow transversely in passing from dark to a lighted place, the strong light of which has a disagreeable effect on the organ of sight. Hence arose, the custom of certain southern people, (in whom the eye-brows are, indeed, naturally thicker, and of a darker colour,) to make them blacker, in order the better to fulfil the intention for which they were designed. The eye-lids, as concerned in the organs of vision, shade the eyes from the continual action of light; these, like all other organs, have occasion for repose, which could not have been procured had the rays of light constantly excited their sensibility. A removal of the eye-lids occasions loss of sleep. The cilia, or hairs, growing upon the margin are destined to prevent insects or other light bodies in the atmosphere from insinuating between the globe of the eye and its covering. The anterior part of the eye, thus defended against external injuries, is continually moistened by the tears, they also guard against the effects of friction, to which the eye is exposed. (See *Eye.*)

Luminous rays, emanating from a light object, form a cone, the apex of which corresponds to the point of a body which we are looking at, and its base is applied to the anterior part of the cornea; all those rays which touch the mirror of the eye, and pass through it, experience a refraction proportioned to the density of the cornea, and to the convexity of this membrane; when approaching the perpendicular, they pass through the aqueous humour which is less dense, and meet with the iris. All those rays which fall on this membrane are reflected, and show its colour different in different individuals. It is only the most central rays that penetrate the pupil, and serve for sight: these enter the pupil in greater or less number, according as it may be more or less dilated. The pupil becomes larger or smaller conformable to the expansion or contraction of the iris. The motions of the iris depend entirely on the mode in which light affects the retina; it is of itself insensible to the impression of luminous rays, as proved by Fontana, who always found it unmoved when he directed rays of light exclusively to it.

The rays to which the pupil gives passage pass through the aqueous humour of the posterior chamber; and soon come into contact with the crystalline lens, which powerfully refracts them, on account of its density and lenticular form. When more approaching the perpendicular by this body, they proceed as far as the retina, through the vitreous humour, which is less dense, and which preserves, without augmentation, the effect of the refraction produced by the chrystalline lens; the rays assembled into one focus strike only a single point of the retina, and produce an impression that gives us an idea of certain properties of the bodies it reflects. It is generally thought that luminous pyramids, which emanate from all points of the object we behold, descussate in passing through the globe of the eye, so that the object itself is figured in a reverse direction. Although the image of each object is traced at the same time in each of our eyes, we have but one sensation, because both sensations are in harmony or combined, and only serve by assisting each other to render the impression stronger and more durable. The correspondence of affection requires the direction of the optic axes on the same objects, and however little this direction be changed we really see double, which happens in strabismus, or squinting.

If the eyes possess a too energetic power of refraction either from too great a convexity of the cornea or crystalline lens, or more considerable density of the humours and excessive depth of the globe of the eye, the luminous rays being united too soon, cross each other, again diverge, fall scattered on the retina, and produce only a confused sensation. In this disease of vision called myopia, patients can only distinguish very near objects, whence rays are given off which require an instrument possessing a considerable power of refraction. In presbyopia, on the contrary, the cornea, being too flat, the crystalline not very convex, or deep-seated, or the humours not sufficiently abundant, cause the rays not to be yet assembled, when they fall on the retina; so that patients can only observe with distinctness remote objects, because the rays that come from them being little divergent, have not occasion to be much refracted. The sensibility of the retina, is under certain circumstances, so much raised, that the eye hardly supports the weakest light. Persons in this situation are called nyctalopes, who distinguish objects in the midst of what others consider utter darkness, as a few rays are sufficient to affect their organ of vision. The eyes are not immoveable in the part they occupy, they are directed towards all the objects of which we wish to form a knowledge by different motions, regulated by four recti and two oblique muscles, and it is observed that there is such a correspondence of action in the muscles that move both eyes, that these organs turn at the same time towards the object, so that the visual axes are directed to the same point.

Seignette's salt. A neutral salt, which consists of soda, potash and tartaric acid. It was prepared and made known by a Frenchman named Peter Seignette, towards the end of the seventeenth century. It was then employed in preference to many other medicines long known, which had been equally serviceable; and by these means, without much trouble, he was enabled to acquire a fortune. It must, however, be allowed that he was a skilful chemist, who, by his writings, and the invention of various other medicines, had obtained considerable reputation as a philosopher and naturalist. He was established as an apothecary at Rochelle; published papers on various natural objects which he had observed in his neighbourhood, in the Memoirs of the Academy of Sciences at Paris, as well as in other works; and died on the 11th of March, 1719.

He recommended this salt, which enriched him, and rendered his name famous, in some small treatises, printed in particular about the year 1662. He called it sometimes alkaline salt, sometimes *sal polycrest*, and sometimes *Rochelle salt*. After his death, his son continued to prepare and to vend it with the greatest success.

Seignette discovered this salt while he was engaged in making soluble tartar, and according to the old opinion, imagining that both the fixed alkalies were the same, used soda instead of potash. By this means he procured, not without surprise, a salt different from the common soluble tartar which he wished to prepare, and from the other well-known salt also. He was induced, therefore, to examine it. The experiments of learned chemists discovered the component parts of this salt. The mode of preparing it was then made publickly known; and, by more accurate examination, the difference before overlooked, between vegetable and mineral alkali, was determined; by which new light was thrown upon chemistry, and an important service rendered to a variety of arts.

Among those who contributed to bring this salt into repute was Nicholas Lemery, to whom Seignette sent a large quantity of it, which he distributed at Paris, though unacquainted with its component parts. Its composition was discovered at the same time, about the year 1731, by two French chemists, Boulduc and Geoffroy; the former published his observations in the Memoirs of the Academy of Sciences; and the latter communicated his to Sir Hans Sloane, who caused them to be printed in the Philosophical Transactions. Neuman, therefore, was not the first who made known the composition of Seignette's salt, in his treatise on Salt-petre; for Neuman's salt is essentially different; and he himself confesses that he was not acquainted with the Rochelle salt. See *Soda tartarizata*.

Seleni'tes. (From σεληνη, the moon.) A white stone having a figure upon it resembling a moon. Sulphate of lime.

Sele'nium. (From σεληνη, the moon; so called from its usefulness in lunacy.) A kind of peony.

Self-heal. See *Prunella*.

Seline. A disease of the nails, in which white spots are occasionally seen in their substance.

Seli'num. (From σεληνη, the moon; from its supposed usefulness in disorders proceeding from the influence of the moon.) Marsh smallage.

SE'LLA TU'RCICA. (*Sella*, *quasi sedda*, from *sedeo*, to sit; and *turcica*, from its supposed resemblance to a Turkish saddle.) *Ephippium*. A cavity in the sphenoid bone, containing the pituitary gland, surrounded by the four clinoid processes.

SELTZER WATER. A saline water, slightly alkaline, highly acidulated with carbonic acid, containing more of this volatile principle than is sufficient to saturate the alkali, and the earths which it holds in solution. It is particulaly serviceable in relieving some of the symptoms that indicate a morbid affection of the lungs; in slow hectic fever, exanthematous eruptions of the skin, foulness of the stomach, bilious vomiting, acidity and heart-burn, spasmodic pains in any part of the alimentary canal, and bloody or highly offensive stools. On account of its property in relieving spasmodic pains, and from its rapid determination to the kidneys, and perhaps its alkaline contents, it has been sometimes employed with great advantage in diseases of the urinary organs, especially those that are attended with the formation of calculus. A large proportion of the Seltzer water, either genuine or artificial, that is consumed in this country, is for the relief of these disorders. Even in gonorrhœa, either simple or venereal, Hoffmann asserts that advantage is to be derived from this medicine. The usual dose is from half a pint to a pint.

Semeca'rpus anaca'rdium. The systematic name, according to some, of the tree which is supposed to afford the Malacca bean. See *Avicenna tomentosa*.

Semeio'sis. (From σημειοω, to notify.) See *Semiotice*.

SE'MEN. 1. The seed, kernel, or stone of the fruit of any vegetable.

2. The seed or prolific liquor secreted in the testicles, and carried through the epididymis and vas deferens into the vesiculæ seminales, to be emitted *sub coitu* into the female vagina, and there, by its aura, to pe-

netrate and impregnate the ovulum in the ovarium.

In castrated animals, and in eunuchs, the vesiculæ seminales are small, and contracted; and a little lymphatic liquor, but no semen, is found in them. The semen is detained for some time in the vesiculæ seminales, and rendered thicker from the continual absorption of its very thin part, by the oscula of the lymphatic vessels. In lascivious men, the semen is sometimes, though rarely, propelled by nocturnal pollution from the vesiculæ seminales, through the ejaculatory ducts, (which arise from the vesiculæ seminales, perforate the urethra transversely, and open themselves by narrow and very nervous mouths at the sides of the caput gallinaginis,) into the urethra, and from it to some distance. But in chaste men the greatest part is again gradually absorbed from the vesiculæ seminales through the lymphatic vessels, and conciliates strength to the body. The smell of semen is specific, heavy, affecting the nostrils, yet not disagreeable. The same odour is observed in the roots of the orchis, the iuli of chesnuts, and the antheræ of many plants. The smell of the semen of quadrupeds, when at heat, is so penetrating as to render their flesh fetid and useless, unless castrated. Thus the flesh of the stag, *tempore coitus*, is unfit to eat. The taste of semen is fatuous and somewhat acrid. In the testes its consistence is thin and diluted; but in the vesiculæ seminales, viscid, dense, and rather pellucid: and by venery and debility it is rendered thinner.

Specific gravity. The greatest part of the semen sinks to the bottom in water, yet some part swims on its surface, which it covers like very fine threads mutually connected together in the form of a cobweb.

Colour. In the testicles it is somewhat yellow, and in the vesiculæ seminales it acquires a deeper hue. That emitted by pollution or coition, becomes white from its mixture with the whitish liquor of the prostate gland during its passage through the urethra. In those people who labour under jaundice, and from the abuse of saffron, the semen has been seen yellow, and in an atrabiliary young man, black.

Quality. Semen exposed to the atmospheric air, loses its pellucidity, and becomes thick, but after a few hours it is again rendered more fluid and pellucid than it was immediately after its emission. This phenomenon cannot arise from water or oxygen attracted from the air. At length it deposits phosphate of lime, and forms a corneous crust.

Experiments with semen prove that it turns the syrup of violets green, and dissolves earthy, neutral, and metallic salts. Fresh semen is insoluble in water, until it has undergone the above changes in atmospheric air. It is dissolved by alkaline salts. By ætherial oil it is dried into a pellucid pellicle, like the cortex of the brain. It is dissolved by all acids, except the oxy-muriatic, by which it is coagulated in the form of white flakes. It is also acted upon by alkohol of wine.

By *dry distillation* semen gives out a small portion of empyreumatic oil, and volatile alkali. The remaining incinerated carbon affords soda and phosphate of lime.

The *constituent principles of semen.* Chemical analysis demonstrates that one hundred parts of semen contain, 1. *Of water,* ninety parts. 2. *Of animal gluten,* six parts. 3. *Of phosphate of lime,* three parts. 4. *Of pure soda,* one part. 5. By microscopical examination, it is asserted that an immense number of very small animalcula, with round tails, called *spermatic animalcules,* may be seen. 6. *The odorous principle,* which flies off immediately from fresh semen. It appears to consist of a peculiar vital principle, and by the antients was called *aura seminis.*

Use. 1. Emitted into the female vagina *sub coitu,* it possesses the wonderful and stupendous power of impregnating the ovulum in the female ovarium. The odorous principle, or aura spermatica only, appears to penetrate through the cavity of the uterus and Fallopian tubes to the female ovarium, and there to impregnate the albuminous latex of the mature ovulum by its vital power. The other principles of the semen appear to be only a vehicle of the seminal aura. 2. In chaste men, the semen returning through the lymphatic vessels into the mass of the blood, gives strength to the body and mind; hence the bull is so fierce and brave, the castrated ox so gentle and weak; hence every animal languishes *post coitum;* and hence tabes dorsalis from onanism. 3. It is by the stimulus of the semen absorbed, at the age of puberty, into the mass of the humours, that the beard and hair of the pubes, but in animals the horns, are produced; and the weeping voice of the boy changed into that of a man.

SE'MEN ADJOWAEN. A seed imported from the East, of a pleasant smell, a grateful aromatic taste, somewhat like savory. It possesses exciting, stimulating, and carminative virtues, and is given in the East in nervous weakness, dyspepsia, flatulency, and heart-burn.

SE'MEN AGA'VE. An East Indian seed, exhibited there in atonic gout.

SE'MEN CO'NTRA. See *Artemisia santonica.*

SEMEN SANCTUM. See *Artemisia santonica.*

SEMI. (*Semi,* from ημισυ, half.) *Semi,* in composition universally signifies half, as *semicupium,* a half-bath, or bath up to the navel; *semilunaris,* in the shape of a half-moon.

SEMICIRCULAR CANALS. These

canals are three in number, and take their name from their figure. They belong to the organ of hearing, and are situated in the petrous portion of the temporal bone, and open into the vestibulum.

SEMICU′PIUM. *Excathisma. Incessio.* A half-bath, or such as receives only the hips, or extremities.

Semi intero′sseus i′ndicis. See *Abductor indicis manus.*

SEMILUNAR VALVES. The three valves at the beginning of the pulmonary artery and aorta are so termed, from their half-moon shape.

SEMIO′TICE. (From σημειον, a sign.) *Semeiosis.* That part of pathology which treats on the signs of diseases.

SEMIMEMBRANO′SUS. *Ischio-popliti-femoral,* of Dumas. This muscle arises from the outer surface of the tuberosity of the ischium, by a broad flat tendon which is three inches in length. From this tendon it has gotten the name of semi-membranosus. It then begins to grow fleshy, and runs at first under the long head of the biceps, and afterwards between that muscle and the semi-tendinosus. At the lower part of the thigh it becomes narrower again, and terminates in a short tendon, which is inserted chiefly into the upper and back part of the head of the tibia, but some of its fibres are spread over the posterior surface of the capsular ligament of the knee. Between this capsular ligament and the tendon of the muscle, we find a small bursa mucosa. The tendons of this and the last-described muscle form the inner ham-string. This muscle bends the leg, and seems likewise to prevent the capsular ligament from being pinched.

SEMI-NERVO′SUS. See *Semitendinosus.*

Semi′nis ejacula′tor. See *Accelerator urinæ.*

Semi-orbicula′ris o′ris. See *Orbicularis oris.*

SEMI-SPINA′LIS CO′LLI. *Semispinalis sive transverso-spinalis colli,* of Winslow, *Spinalis cervicis,* of Albinus, *Spinalis colli,* of Douglas, *Transversalis colli,* of Cowper, and *Transverso-spinal,* of Dumas. A muscle situated on the posterior part of the neck, which turns the neck obliquely backwards, and a little to one side. It arises from the transverse processes of the uppermost six vertebræ of the back by as many distinct tendons, ascending obliquely under the complexus, and is inserted into the spinous processes of all the vertebræ of the neck, except the first and last.

SEMI-SPINA′LIS DO′RSI. *Semispinalis externus seu transverso-spinalis dorsi,* of Winslow. *Semi-spinatus,* of Cowper, and *Transverso-spinal,* of Dumas. A muscle situated on the back, which extends the spine obliquely backwards. It arises from the transverse processes of the seventh, eighth, ninth, and tenth vertebræ of the back, by as many distinct tendons, which soon grow fleshy, and then become tendinous again, and are inserted into the spinous processes of all the vertebræ of the back above the eighth, and into the lowermost of the neck, by as many tendons.

Semi-spina′lis exte′rnus. See *Semi-spinalis dorsi.*

Semi spina′tus. See *Semi-spinalis dorsi.*

SEMI-TENDINO′SUS. This muscle, which is the *semi-nervosus,* of Douglas and Winslow, and *Ischio-creti-tibial,* of Dumas, is situated obliquely along the back part of the thigh. It arises tendinous and fleshy from the inferior, posterior, and outer part of the tuberosity of the ischium, in common with the long head of the biceps cruris, to the posterior edge of which it continues to adhere, by a great number of oblique fibres, for the space of two or three inches. Towards the lower part of the os femoris, it terminates in a round tendon, which passes behind the inner condyle of the thigh bone, and becoming flat, is inserted into the upper and inner part of the ridge of the tibia, a little below its tuberosity. This tendon sends off an aponeurosis, which helps to form the tendinous fascia that covers the muscles of the leg. This muscle assists in bending the leg, and at the same time draws it a little inwards.

SEMPERVI′VUM. (From *semper,* always, and *vivo,* to live; so called because it is always green.)

1. The name of a genus of plants in the Linnæan system. Class, *Dodecandria.* Order, *Polygynia.*

2. The pharmacopœial name of some plants.

Sempervi′vum a′cre. The stone-crop is occasionally so termed. See *Sedum acre.*

Sempervi′vum tecto′rum. The systematic name of the house-leek. *Sedum majus. Aizoon. Barba Jovis.* House-leek, or sengreen. The leaves of this plant have no remarkable smell, but discover to the taste a mild subacid austerity; they are frequently applied by the vulgar to bruises and old ulcers.

SENAC, John, was born in Gascony, about the close of the seventeenth century. He is stated to have received the degree of doctor at Rheims, and that of bachelor of physic at Paris. He was a man of profound erudition, united with great modesty; and by his industry acquired much experience. His merits procured him the favour of Louis XV. who appointed him his consulting, and afterwards his chief physician, which office he retained till his death in 1770. He was also a member of the Royal Academy of Sciences at Paris, and of the Royal Society of Nancy. He left some works, which will probably maintain a lasting reputation, particularly his treatise on the Structure, Function, and Diseases of the Heart. An edition of Heister's Anatomy, with some interesting Observations, was published by him when young. A paper on Drowning, in the Memoirs of the Academy of Sciences, refuting certain erroneous opinions respecting the Cause of Death, and the Treatment founded upon them, is also due to him; as well as some other minor publications.

SENE′CIO. (*Senecio*, from *senesco*, to grow old; so called because it has a greyish down upon it, like the beard of old men.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*.

2. The pharmacopœial name also of the groundsel. See *Senecio vulgaris*.

Sene′cio Jacobæ′a. *Jacobæa*. St. James's wort. Ragwort. *Senecio jacobæa*, of Linnæus. The leaves of this common plant have a roughish, bitter, sub-acrid taste, extremely nauseous. A decoction is said to have been of infinite service in the cure of epidemic camp dysentery. A poultice made of the fresh leaves is said to have a surprising effect in removing pains of the joints, and to remove the sciatica, or hip gout, in two or three applications, when ever so violent. The root is of an healing, adstringent nature. A decoction of it is good for wounds and bruises.

Sene′cio madraspata′nus. See *Senecio pseudo-china*.

Sene′cio pseudo-chi′na. *China supposita*. *Senecio madraspatanus*. *Senecio pseudo-china*, of Linnæus. Bastard China. It grows in Malabar. The root greatly resembles the China root in appearance and qualities.

Sene′cio vulga′ris. *Erigerum*. *Senecio*. *Erigeron*. Groundsel. This very common plant is frequently applied bruised to inflammations and ulcers, as a refrigerant and antiscorbutic.

Sene′cta a′nguium. The cast skin of a serpent; its decoction is said to cure deafness.

Se′nega. See *Seneka*.

Senegal gum. See *Mimosa senegal*.

Senegaw milkwort. See *Polygala senega*.

SE′NEKA. (So called because the Seneca or Senegaw Indians use it against the bite of the rattlesnake.) See *Polygala senega*.

Sengreen. See *Sempervivum tectorum*.

SE′NNA. (From *senna*, an Arabian word, signifying acute; so called from its sharp-pointed leaves.) See *Cassia senna*.

Se′nna alexandri′na. See *Cassia senna*.

Se′nna electua′rium e. See *Confectio sennæ*.

Se′nna ita′lica. See *Cassia senna*.

Se′nna pau′perum. Bastard senna, or milk-vetch.

Se′nna sco′rpium. The scorpion senna.

Se′nnæ extra′ctum. Extract of senna.

Se′nnæ infu′sum. See *Infusum sennæ*.

Se′nnæ infu′sum tartariza′tum. Senna, coriander, and cream of tartar, infused in water.

SENNERTUS, Daniel, was born at Breslaw in 1572. He was sent to Wittemberg at the age of twenty-one, and exhibited such marks of talent, that every opportunity was afforded him of visiting the other celebrated universities of Germany. On his return in 1601 he received the degree of doctor, and the next year was appointed to a professorship of medicine. He distinguished himself greatly by his eloquence and sound knowledge, and his publications concurred in raising his fame, insomuch that he was consulted by patients from all parts of the world; towards whom he evinced great disinterestedness. The plague prevailed seven times at Wittemberg, while he was professor there, yet he never quitted his post, nor declined his services, even to the poorest sick: however, he was at last a victim to that disease in 1637. Sennertus was a voluminous writer, and has been represented by some as a mere compiler; but his works are valuable, as containing a full and clear epitome of antient learning; and besides, display much judgment, and freedom in criticising their doctrines, which indeed involved him in many controversies. He first introduced the study of chemistry at Wittemberg; and in his writings he maintained the propriety of admitting chemical as well as Galenical theories and remedies into medicine.

SENSATION. Sensation, or feeling, is the consciousness of a change taking place in any part, from the contact of a foreign body with the extremities of our nerves. The seat of sensation is in the pulp of the nerves.

The impression produced on any organ by the action of an external body constitutes sensation. This sensation, transmitted by nerves to the brain, is perceived, that is, felt by the organ; the sensation then becomes *perception*; and this first modification implies, as must be evident, the existence of a central organ, to which impressions produced on the senses are conveyed. The cerebral fibres are acted on with greater or less force by the sensations propagated by all the senses influenced at the same time; and we could only acquire confused notions of all bodies that produce them, if one particular and stronger perception did not obliterate the others, and fix our attention. In this collective state of the mind on the same subject, the brain is weakly affected by several sensations which leave no trace behind. It is on this principle that, having read a book with great attention, we forget the different sensations produced by the paper and characters.

When a sensation is of short duration, the knowledge we have of it is so weak, that soon afterwards there does not remain any knowledge of having experienced it. In proportion as a sensation, or an idea, which is only a sensation transformed or perceived by the cerebral organ, has produced in the fibres of this organ a stronger or weaker impression, the remembrance of it becomes more or less lively and permanent. Thus we have a *reminiscence* of it, that is, call to mind that we have already been affected in the same manner; *a memory*, or the act of recalling the object of the sensation with some of its attributes, as colour, volume, &c.

When the brain is easily excitable, and, at the same time, accurately preserves impressions received, it possesses the power of representing to itself ideas with all their connections, and all the accessory circumstances by which they are accompanied, of reproducing them in a certain degree, and of recalling an entire object, while the memory only gives us an idea of its qualities. This creative faculty is called *imagination*. When two ideas are brought together, compared, and their analogy considered, we are said to form a *judgment*; several judgments connected together constitute reasoning.

Besides the sensations that are carried from the organs of sense to the brain, there are others, internal, that seem to be transmitted to it by a kind of sympathetic reaction. It is well known what uneasiness the affection of certain organs conveys to the mind, how much an habitual obstruction of the liver is connected with a certain order of ideas; these internal sensations are the origin of our moral faculties, in the same manner as impressions that are conveyed by the organs of sense are the source of intellectual faculties. We are not on that account to place the seat of the passions of the mind in the viscera; it is only necessary to remember that the appetites, whence arise the passions, reside in their respective organs, and are a phenomenon purely physical, while passion consists, at the same time, in the intellectual exertion. Thus an accumulation of semen in the cavities that are employed as a reservoir for it, excites the appetite for venery, very distinct from the passion of love, although it may be frequently the determinate cause of it.

The senses may be enumerated under the following heads, viz. the sense of vision, hearing, smelling, tasting, touching.

SENSIBILITY. The capability which a nerve possesses of conveying the sensation produced by the contact of another body with it. All parts possessed of a power of producing a change, so as to excite a sensation, are called *sensible*; those which are not possessed of this property, *insensible*. To the insensible parts by nature belong all our fluids, the blood, bile, saliva, &c. and many of the solids, the hair, epidermis, nails, &c.; but the sensible parts are the skin, eyes, tongue, ear, nose, muscles, stomach, intestines, &c.

SENSO'RIUM. See *Cerebrum*.

SENSO'RIUM COMMU'NE. See *Cerebrum*.

SE'NSUS EXTE'RNI. The external senses are seeing, hearing, tasting, smelling, and feeling.

SE'NSUS INTE'RNI. The internal senses are imagination, memory, judgment, attention and the passions.

SENTIENT EXTREMITIES. The extremities of the nerves.

SEPARATO'RIUM. (From *separo*, to separate.) An instrument for separating the pericranium from the skull, and a chemical vessel for separating essential parts of liquids.

SE'PIA OFFICINA'LIS. *Sepium*. *Præcipitans magnum*. The cuttle fish. The systematic name of the fish whose shell possesses calcareous qualities, and is often mixed into tooth-powders.

SE'PIÆ OS. See *Sepia officinalis*.

SEPTENARY YEARS. Climacteric years. A period, or succession of years in human life, at which, important constitutional changes are supposed to take place; and the end of this period is therefore judged critical. This period is fixed at every seventh year. The grand climacteric is fixed at 63, and, passing that time, age, it is considered, may be protracted to 90. So general is this belief, that the passing of 60 generally gives much anxiety to most people.

Septfoil. See *Tormentilla*.

SEPTIC. (*Septica*; from σηπω, to putrefy.) Relating to putrefaction.

SE'PIUM. See *Sepia officinalis*.

SEPTIFO'LIA. (From *septem*, seven, and *folium*, a leaf; so named from the number of its leaves.) Coralwort, or septfoil toothwort.

SEPTINE'RVIA. (From *septem*, seven, and *nervus*, a string; so called from the seven strings upon its leaf.) A species of plantain.

SE'PTUM CEREBE'LLI. A process of the dura mater, dividing the cerebellum perpendicularly into two principal parts.

SE'PTUM CE'REBRI. The falciform process of the dura mater is sometimes so called. See *Falciform process*.

SE'PTUM CO'RDIS. (*Septum*; from *sepio*, to separate.) The partition between the two ventricles of the heart.

SE'PTUM LU'CIDUM. *Septum pellucidum*. The thin and tender portion of the brain, dividing the lateral ventricles from each other.

SE'PTUM NA'RIUM. *Interseptum*. The partition between the nostrils.

SE'PTUM PALA'TI. The partition of the palate.

SE'PTUM PELLU'CIDUM. See *Septum lucidum*.

SE'PTUM THORA'CIS. See *Mediastinum*.

SE'PTUM TRANSVE'RSUM. See *Diaphragm*.

SERA′PIAS. (From *Serapis*, a lascivious idol; so called because it was thought to promote venery; or from the testiculated shape of its root.) The name of a genus of plants in the Linnæan system. Class, *Gynandria*. Order, *Diandria*.

Serapi′num. The gum-resin sagapenum is sometimes so called. See *Sagapenum*.

SERAPION, of Alexandria, lived about 280 years before Christ, and is affirmed by Celsus to have been the founder of the empiric sect of Physicians; though others have attributed the origin of this sect to Philinus.

SERAPION, John, an Arabian Physician, who lived between the time of Mesue and Rhazes, towards the middle of the ninth century, and is supposed to have been the first writer on physic in the Arabic language. Haly Abbas describes his writings as containing only the cure of diseases, without any precepts concerning the preservation of health, or relating to surgery: and they are frequently quoted by Rhazes. He often transcribes the remarks of Alexander Trallian, with whom the other Arabians appear to be little acquainted. Some confusion appears to exist respecting another Serapion, who is supposed to have lived 180 years later, and to have been the author of a work on the Materia Medica, entitled "De Medicamentis tam simplicibus, quam compositis;" in which authors are quoted, much posterior to Rhazes, Avenzoar for instance, so that it must have been written towards the latter part of the eleventh century.

Seri′phium. (From *Seriphus*, an island upon which it grew.) Flix-weed.

Se′ris. Σερις. Endive.

Sermountain. See *Laserpitium siler*.

Serous apoplexy. See *Apoplexia*.

Serpenta′ria gallo′rum. The arum dracunculus. See *Arum dracunculus*.

Serpenta′ria hispa′nica. The viper's grass. See *Scorzonera*.

Serpenta′ria virginia′na. (So called from the resemblance of its roots to the tail of the rattle-snake.) See *Aristolochia serpentaria*.

Serpe′ntum li′gnum. See *Ophioxylum serpentinum*.

Serpe′ntum ra′dix. See *Ophiorrhiza mungos*.

SERPI′GO. (From *serpo*, to creep; because it creeps on the surface of the skin by degrees.) A ring-worm, or tetter. See *Herpes*.

Serpy′llum. (From ερπω, to creep, or *a serpendo*, by reason of its creeping nature.) See *Thymus serpyllum*.

Serpy′llum citra′tum. See *Thymus serpyllum*.

Serpy′llum vulga′re mi′nus. See *Thymus serpyllum*.

Serra′ta. (From *serra*, a saw; so called from its serrated leaves.) See *Serratula*.

SERRA′TULA. (From *serra*, a saw; so called from its serrated leaves.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia æqualis*.

Serra′tula ama′ra. The systematic name of a species of saw-wort which is said to cure agues.

Serra′tula arve′nsis. The common creeping way-thistle.

Serra′tus anti′cus. See *Pectoralis minor*.

SERRA′TUS MA′GNUS. (*Serratus*; from *serra*, a saw; so called from its saw-like appearance.) *Serratus major anticus*, of Douglas and Cowper. *Serratus major*, of Winslow, and *Costo basi-scapulaire*, of Dumas. This muscle is so named by Albinus. Douglas calls it *serratus major anticus*, but improperly, as it is seated at the side, and not at the anterior part of the thorax. It is a broad fleshy muscle, of a very irregular shape, and is in part covered by the subscapularis, pectoralis, and latissimus dorsi. It arises, by fleshy digitations, from the eight superior ribs, and is inserted fleshy into the whole basis of the scapula internally, between the insertion of the rhomboides, and the origin of the subscapularis, being folded, as it were, about the two angles of the scapula. This muscle may easily be divided into two and even three portions. The latter division has been adopted by Winslow. The first of these portions is the thick and short part of the muscle that arises from the first and second ribs, and is inserted into the upper angle of the scapula, its fibres ascending obliquely backwards. The second portion arises from the second rib, behind the origin of the first portion, and likewise from the third and fourth ribs; this portion is thin and short, and its fibres run nearly in a horizontal direction, to be inserted into the basis of the scapula. The third, and most considerable portion, is that which arises from the fifth, sixth, seventh, and eighth ribs, and is inserted into the lower angle of the scapula. The serratus magnus serves to move the scapula forwards, and it is chiefly by the contraction of this muscle that the shoulder is supported, when loaded with any heavy weight. The antients, and even many of the moderns, particularly Douglas and Cowper, supposed its chief use to be to dilate the thorax, by elevating the ribs; but it can only do this when the scapula is forcibly raised.

Serra′tus ma′jor anti′cus. See *Serratus magnus*.

Serra′tus mi′nor anti′cus. See *Pectoralis minor*.

SERRA′TUS POSTI′CUS INFE′RIOR. *Dorso-lumbo-costal*, of Dumas. This is a thin muscle of considerable breadth, situated at the bottom of the back, under the middle part of the latissimus dorsi. It arises by a broad thin tendon, in common with that of the last-mentioned muscle, from the spinous processes of the two, and sometimes of the three inferior dorsal vertebræ, and from three, and sometimes four of those of the lumbar vertebræ. It then becomes fleshy, and, ascending a little obliquely outwards and forwards, divides into three, and sometimes four fleshy slips, which are inserted into the lower edges of the three or four inferior ribs, at a little distance from their cartilages. Its use seems to be to pull the ribs downwards, backwards, and outwards.

SERRA′TUS SUPE′RIOR POSTI′CUS. *Cervici-dorso-costal*, of Dumas. This is a small, flat, and thin muscle, situated at the upper part of the back, immediately under the rhomboideus. It arises, by a broad thin tendon, from the lower part of the ligamentum colli, from the spinous process of the last vertebra of the neck, and the two or three uppermost of the back, and is inserted into the second, third, fourth, and sometimes fifth ribs, by as many distinct slips. Its use is to expand the thorax, by pulling the ribs upwards and outwards.

Se′rtula campa′na. See *Trifolium melilotus.*

SE′RUM. (From *serus*, late; because it is the remainder of the milk, after its better parts have been taken from it.) 1. Whey. 2. The yellow and somewhat greenish fluid which separates from the blood when cold and at rest. See *Blood.*

Se′rum alumino′sum. Alum whey.

Se′rum la′ctis. Whey.

SERVETUS, Michael, was born at Villaneuva, in Arragon, in 1509. He first studied the law at Toulouse; but his attention was drawn to theology by the discussions of the reformers; and as he was disposed to carry his dissent from the church of Rome even to a greater length, he judged it prudent to retire into Switzerland, where he published his opinions concerning the Trinity. He afterwards went to study physic at Paris, where he took his degree, and then gave mathematical lectures, while he followed the profession of a physician; but having quarrelled with the faculty, and his "Apology" being suppressed by the parliament, he removed to Charlieu, and soon after to Vienna, at the invitation of the archbishop. Here he published a more full account of his religious opinions under a feigned name; but Calvin, the reformer, in whom he had confided, betrayed him to the magistrates, so that he was thrown into prison, from which, however, he escaped. But as he was passing through Geneva, Calvin, whose treachery he did not suspect, procured his arrest, and a charge of blasphemy and heresy to be brought against him; of which, being found guilty, he was cruelly burnt alive, in 1553. Servetus is numbered among those anatomists who made the nearest approach to the doctrine of the circulation of the blood: in the work already mentioned, which led to his death, the passage of the blood through the lungs is clearly stated. He was a man of great learning and unfeigned piety, and generally admired for his worth and talents, and the discoveries which he made in medicine, as well as other branches of knowledge.

Service-tree. The fruit of this tree is considered powerfully astringent, and recommended in fluxes and dysenteries. It is given in the form of rob, and it is equally useful in distilling brandy and making cider.

SESAMOID BONES. (*Ossa sesamoidea*; from σησαμη, an Indian grain, and ειδος, likeness.) This term is applied to the little bones, which, from their supposed general resemblance to the seeds of the sesamum, are called *ossa sesamoidea*. They are found at the articulations of the great toes, and sometimes at the joints of the thumbs; now and then we meet with them upon the condyles of the os femoris, at the lower extremity of the fibula, under the os cuboides of the tarsus, &c. They do not exist in the fœtus, but as we advance in life, begin first to appear in a cartilaginous state, and, at length, in adult subjects, are completely ossified. Age and hard labour seem to add to the number and size of these bones, and being most commonly found wherever the tendons and ligaments are most exposed to pressure from the action of the muscles, they are now generally considered by anatomists as the ossified parts of tendons and ligaments. These bones are usually smooth and flat on the side of the bone on which they are placed; their upper surface is convex, and, in general, adheres to the tendon that covers it, and of which it may, in some measure, be considered as a part. Although their formation seems to be owing to accidental circumstances, yet, as the two at the first joint of the great-toe are much larger than the rest, and are seldom wanting in an adult, it would seem as if these bones were of some utility; perhaps by removing the tendons farther from the centre of motion, and thus increasing the power of the muscles. The ossa sesamoidea of the great-toe and thumb seem likewise to be of use, by forming a groove for lodging the flexor tendons secure from compression.

Sesamoidal bones. See *Sesamoid bones.*

SE′SAMUM. (An Egyptian word.) 1. The name of a genus of plants in the Linnæan system.

2. The pharmacopœial name of the *Sesamum orientale*, of Linnæus; which see.

Se′samum orienta′le. *Sesamum.* The seeds of this plant are in much esteem in South Carolina, where they are called *oily grain*, they are made into soups and puddings after the manner of rice. Toasted over the fire, they are mixed with other ingredients, and stewed into a delicious food. The fresh seed affords a considerable quantity of a warm pungent oil, otherwise not unpalatable. In a year or two the pungency leaves it, when the oil is used for sallad, &c. The seeds of the *Sesamum indicum* are used in the same manner. The leaves are also used medicinally in some countries, being of a mucilaginous quality.

SE′SELI. (*Παρα το σαωσαι ελλον*; because it is salutary for young fawns.)

1. The name of a genus of plants. Class, *Pentandria*. Order, *Digynia*.

2. See *Laserpitium siler*.

SE′SELI CRE′TICUM. There is great confusion amongst the species of the seseli. The plant which bears this epithet in the pharmacopœias is the *Tordylium officinale*, of Linnæus. The seeds are said to be diuretic.

SE′SELI MASSILIENSE. See *Seseli tortuosum*.

SE′SELI TORTUO′SUM. The systematic name of the hart-wort of Marseilles. *Seseli massiliense*. This plant is the *Seseli tortuosum*, of Linnæus. The seeds are directed for medicinal use, and have a warm biting taste, and a greater degree of pungency than those of the *Laserpitium*.

SESQUI. This word, joined with any number, weight, measure, &c. signifies one integer and an half; as *sesqui granum*, a grain and an half.

SETA′CEUM. (From *seta*, a bristle; because horse-hairs were first used to keep open the wound.) A seton. See *Seton*.

SETON. *Setaceum*. An artificial ulcer made under the skin by means of an instrument called the seton needle, which carries with it a portion of thread or silk, that is moved backwards or forwards, and thus keeps up a constant irritation.

Setterwort. See *Helleborus fœtidus*.

SEVERINUS, MARCUS AURELIUS, was born in Calabria, in 1580. He graduated at Naples, where he became one of the most celebrated professors in anatomy and surgery. He was, however, somewhat harsh in his practice; and in his work, "De Efficaci Medicina," condemned his contemporaries for neglecting the use of the cautery, and of the knife, as practised by the antients. He died in 1656. Many publications were written by him, evincing much boldness and originality of thought, but too great attachment to paradox. His treatise on abscesses, in eight books, passed through many editions. He paid considerable attention to comparative anatomy, on which subject some of his works are composed.

SE′VUM CE′TI. See *Physeter macrocephalus*.

SE′VUM OVI′LE. *Sevum ovillum*. Mutton suet.

SEXUAL ACTIONS. Sexual functions. Those functions proper to each sex, by which the species is propagated, as the excretion of semen in men; menstruation, conception, the evolution of the fœtus, parturition, &c. in women.

SEXUAL SYSTEM OF PLANTS. Linnæan system. The sexual system of plants was invented by the immortal Linnæus, professor of physic and botany at Upsal, in Sweden. It is founded on the parts of fructification, viz. the stamens and pistils; these having been observed with more accuracy since the discovery of the uses for which nature has assigned them, a new set of principles has been derived from them, by means of which the distribution of plants has been brought to a greater precision, and rendered more conformable to true philosophy, in this system, than in any one of those which preceded it. The author does not pretend to call it a natural system, he gives it as artificial only, and modestly owns his inability to detect the order pursued by nature in her vegetable productions; but of this he seems confident, that no natural order can ever be framed without taking in the materials out of which he has raised his own; and urges the necessity of admitting artificial systems for convenience, till one truly natural shall appear. Linnæus has given us his *Fragmenta methodi naturalis*, in which he has made a distribution of plants under various orders, putting together in each such as appear to have a natural affinity to each other; this, after a long and fruitless search after the natural method, he gives as the result of his own speculation, for the assistance of such as may engage in the same pursuit.

Not able to form a system after the natural method, Linnæus was more fully convinced of the absolute necessity of adopting an artificial one. For the student to enter into the advantages this system maintains over all others, it is necessary that he be instructed in the science of botany, which will amply repay him for his inquiry. The following is a short outline of the sexual system.

The parts of the fructification of a plant are,

1. The *calyx*, called also the empalement, or flower-cup.

2. The *corolla*, or foliation, which is the gaudy part of the flower, called vulgarly the leaves of the flower.

3. The *stamens*, or threads, called also the chives; these are considered as the male parts of the flower.

4. The *pistil*, or pointal, which is the female part.

5. The *pericarp*, or seed-vessel.

6. The *seed*.

7. The *receptacle*, or base, on which these parts are seated.

The four first are properly parts of the flower, and the three last parts of the fruit. It is from the number, proportion, position and other circumstances attending these parts of the fructification, that the classes and orders, and the genera they contain, are to be characterized, according to the sexual system.

Such flowers as want the stamens, and have the pistil, are termed *female.*

Those flowers which have the stamens, and want the pistils, are called *male.*

Flowers which have both stamens and pistils are said to be *hermaphrodite.*

Neuter flowers are such as have neither stamens nor pistils.

Hermaphrodite flowers are sometimes distinguished into *male hermaphrodites* and *female hermaphrodites.* This distinction takes place when, although the flower contains the parts belonging to each sex, one of them proves abortive or ineffectual; if the defect be in the stamina, it is a female hermaphrodite, if in the pistil, a male one.

Plants, in regard to sex, take also their denominations in the following manner:

1. *Hermaphrodite plants* are such as bear flowers *upon the same root* that are all hermaphrodite.

2. *Androgynous plants,* are such as, *upon the same root,* bear both male and female flowers, distinct from each other, that is, in separate flowers.

3. *Male plants,* such as bear male flowers only upon the same root.

4. *Female Plants,* such as bear female flowers only upon the same root.

5. *Polygamous plants,* such as, either on the same or on different roots, bear hermaphrodite flowers, and flowers of either or both sexes.

The first general division of the whole body of vegetables is, in the sexual system, into twenty-four *classes;* these again are subdivided into *orders;* the orders into *genera;* the genera into *species;* and the species into varieties, where they are worthy of note.

A Table of the Classes and Orders.

Classes.	Orders.
1. Monandria.	Monogynia. Digynia.
2. Diandria.	Monogynia. Digynia. Trigynia.
3. Triandria.	Monogynia. Digynia. Trigynia.
4. Tetrandia.	Monogynia. Digynia. Tetragynia.
5. Pentandria.	Monogynia. Digynia. Trigynia. Tetragynia. Pentagynia. Polygynia.
6. Hexandria.	Monogynia. Digynia. Trigynia. Tetragynia. Polygynia.
7. Heptandria.	Monogynia. Digynia. Tetragynia. Heptagynia.
8. Octandria.	Monogynia. Digynia. Trigynia. Tetragynia.
9. Enneandria.	Monogynia. Trigynia. Hexagynia.
10. Decandria.	Monogynia. Digynia. Trigynia. Pentagynia. Decagynia.
11. Dodecandria.	Monogynia. Digynia. Trigynia. Pentagynia. Dodecagynia.
12. Icosandria.	Monogynia. Digynia. Trigynia. Pentagynia. Polygynia.
13. Polyandria.	Monogynia. Digynia. Trigynia. Tetragynia. Pentagynia. Hexagynia. Polygynia.
14. Didynamia.	Gymnospermia. Angiospermia.
15. Tetradynamia.	Siliculosa. Siliquosa.
16. Monadelphia.	Pentandria. Decandria. Enneandria. Dodecandria. Polyandria.
17. Diadelphia.	Pentandria. Hexandria.
18. Polyadelphia.	Pentandria. Icosandria. Polyandria.
19. Syngenesia.	Polygamia æqualis. Polygamia superflua. Polygamia frustranea. Polygamia necessaria. Polygamia segregata. Monogamia.
20. Gynandria.	Diandria. Triandria. Tetrandria. Pentandria. Hexandria. Decandria. Dodecandria. Polyandria.
21. Monoecia.	Monandria. Diandria. Triandria. Tetrandria. Pentandria. Hexandria. Heptandria. Polyandria. Monadelphia. Syngenesia. Gynandria.
22. Dioecia.	Monandria. Diandria. Triandria. Tetrandria. Pentandria. Hexandria. Octandria. Enneandria. Decandria. Dodecandria. Polyandria. Monadelphia. Syngenesia. Gynandria.
23. Polygamia.	Monoecia. Dioecia. Trioecia.
24. Cryptogamia.	Filices. Musci. Algæ. Fungi.
Appendix.	Palmæ.

Explanation of these terms.

As these terms in the Greek language, from whence they are taken, are all expressive of the principal circumstance that obtains in the class to which they are applied, the explanation of them will give the reader a good insight into the proper characters of the several classes, and the sexual distinctions on which they are founded.

Monandria; from μονος, one, and ανηρ, a husband, that is, a stamen.

Diandria; from δις, two, and ανηρ, a husband.

Triandria; from τρεις, three, and ανηρ, a husband.

Tetrandria; from τεσσαρες, four, and ανηρ, a husband.

Pentandria; from ϖεντε, five, and ανηρ, a husband.

Hexandria; from εξ, six, and ανηρ, a husband.

Heptandria; from επτα, seven, and ανηρ, a husband.

Octandria; from οκτω, eight, and ανηρ, a husband.

Enneandria; from εννεα, nine, and ανηρ, a husband.

Decandria; from δεκα, ten, and ανηρ, a husband.

It is necessary to observe here, that the flowers must all be hermaphrodite in these classes; for should the female part be wanting, the plant would belong to some other class, notwithstanding the number of stamina may be such as would otherwise refer it to one of these.

Dodecandria; from δωδεκα, twelve, and ανηρ, a husband.

Notwithstanding the term implies that the flowers have twelve stamina, the class is not confined to this number, but includes all such hermaphrodite flowers as are furnished with any number of stamina, from *twelve* to *nineteen* inclusive. No flowers have yet been discovered that have eleven stamina, which is the reason no class has been allotted to that number.

Icosandria; from εικοσι, twenty, and ανηρ, a husband.

Here, again, the title is to be understood with considerable latitude; for, though it means that the flowers have *twenty* stamens, yet the plants belonging to this class, though rarely found with less, frequently have a greater number, and are, therefore, not to be known with certainty from the next class, except by the stamina arising from the calyx, not from the receptacle.

Polyandria; from ϖολυς, many, and ανηρ, a husband.

This class comprehends those hermaphrodite plants whose flowers have more stamens disunited than twenty, originating from the receptacle.

Didynamia; from δις, two, and δυναμις, power.

This term imports the *power* or *superiority* of two, and is applied to this class, because its flowers have four stamina, of which there are two longer than the rest. This circumstance alone is sufficient to distinguish this from the fourth class, where the four stamens are equal.

Tetradynamia; from τεσσαρες, four, and δυναμις, power.

This term implies the power or superiority of four, and accordingly there are in the flowers of this class six stamens, four of which are longer than the rest, which circumstance distinguishes them from those of the sixth class where they are equal.

Monadelphia; from μονος, one, and αδελφος, a brother.

The word here compounded with the numerical term, signifies a brother. This relation is employed to express the union of the filaments of the stamen, which in this class do not stand separate, but join at the base, and form *one* substance, out of which they proceed as from a common mother, and the title, therefore, expresses a single brotherhood, meaning, that there is but one set of stamens so united, which distinguishes this class from the two following. The number of stamens, it is to be recollected, is not limited.

Diadelphia; from δις, two, and αδελφος, a brother.

This term implies a double brotherhood, or two sets of stamens, united in the manner explained in the former class. The number of stamens is not limited.

Polyadelphia; from ϖολυς, many, and αδελφος, a brother.

Many brotherhoods or sets of stamens is meant by this term.

Syngenesia; from συν, together, and γενεσις, generation.

This term implies *congeneration*, for though the stamens stand separate, yet their anthers or tops, which are the parts more immediately subservient to generation, are united in a cylinder, and perform their office together.

Gynandria; from γυνη, a wife, and ανηρ, a husband.

This term alludes to the singular circumstance of this class, in the flowers of which the stamens grow upon the pistil; so that the male and female parts are united, and do not stand separate, as in other hermaphrodite flowers.

Monoecia; from μονος, one, and οικος, a house.

The word here compounded with the numerical term, signifies a *house* or *habitation*. To understand the application of this title, it must be observed, that the plants of this class are not hermaphrodite but androgynous; the flowers that have the stamens wanting the pistil, and those that have the pistil wanting the stamen, so that *monoecia* signifying a *single house*, alludes to this circumstance, that in this class the male and female flowers are both found on the same plant or house.

Dioecia; from δις, two, and οικος, a house.

This term signifies two houses, and is applied to this class, the plants of which are male and female, to express the circumstance of the *male* flowers being on one plant, and the *female* on another; the contrary of which is the case of the androgynous class *Monoecia*.

Polygamia; from ϖολυς, many, and γαμος, nuptials.

This term implies plurality of marriages. This class produces, either upon the same or different plants, *hermaphrodite* flowers, and also flowers of *one* sex only, be it male or female; or flowers of each sex; and the latter receiving impregnation from, or giving it to the hermaphrodites, as their sex happens to be; the parts essential to generation in the hermaphrodite flowers, do not confine themselves to the corresponding parts within the same flower, but become of *promiscuous* use, which is the reason of giving this title.

Cryptogamia; from κρυπτος, concealed, and γαμος, nuptials.

This term means a concealment of marriages; the class consists, therefore, of such plants as either bear their flowers concealed within the fruit, or have them so small as to be imperceptible.

Explanation of the titles of the orders.

Monogynia; from μονος, one, and γυνη, a woman, that is, a pistil.

Digynia; from δις, two, and γυνη, a woman.

Trigynia; from τρεις, three, and γυνη, a woman.

Tetragynia; from τεσσαρες, four, and γυνη, a woman.

Pentagynia; from ϖεντε, five, and γυνη, a woman.

Hexagynia; from εξ, six, and γυνη, a woman.

Heptagynia; from επτα, seven, and γυνη, a woman.

Decagynia; from δεκα, ten, and γυνη, a woman.

Polygynia; from ϖολυς, many, and γυνη, a woman.

These are the titles that occur in the thirteen first classes, and the general explanation of one pistil, two pistils, &c. will be sufficient to make it appear how they are employed in the class.

The class didynamia contains the orders:

Gymnospermia; from γυμνος, naked, and σπερμα, a seed.

Angiospermia; from αγγος, a vessel, and σπερμα, a seed; which are distinguished by the seed being either naked, or enclosed in a pericarp or seed-vessel.

The other two orders in the Class *Tetradynamia*, are founded on a distinction in the pericarp.

Siliculosa; means having a *little siliqua*.

Siliquosa, having a *siliqua*; which is a particular kind of seed-vessel.

To explain the orders contained in the Class *Syngenesia*, viz. *Polygamia æqualis*, *Polygamia superflua*, *Polygamia frustranea*, *Polygamia necessaria*, *Polygamia segregata*, *Monogamia*, it is necessary to explain what is meant by polygamy in flowers. It has been before observed, what is meant by *polygamous plants*: but in respect to flowers, the term is applied to a single flower only, for the flowers of this class being compound, a polygamy arises from the intercommunication of the several florets in one and the same flower. Now, the *polygamy of flowers*, in this sense of the word, affords four cases which are the foundations of the four first orders of this class: *equal polygamy*, is when all the flowers are hermaphrodite: *superfluous polygamy*, is when some of the florets are hermaphrodite, and others female only; for, in this case, as the fructification is perfected in the hermaphrodites, the addition of the females is a superfluity: *frustraneous polygamy*, is when some of the florets are hermaphrodite, and others neuter; for in this case, the addition of the neuters is of no assistance to the fructification: *necessary polygamy*, is when some of the florets are male, and the rest female; for, in this case, there being no hermaphrodites, the polygamy arising from the composition of the florets of different sexes, is *necessary* to perfect the fructification: *polygamia segregata* implies separation; the plants of this order having partial cups growing out of the common calyx which surround and divide the florets. The Order *Monogamia* signifies a single marriage, and is opposed to the polygamy of the four other orders; for in this, although the anthers are united, which is the essential character of the flowers of this class, the flower is simple, and not compounded of many florets, as in the other orders.

The title of the other orders to that of *Trioecia*, in the Class *Polygamia*, have already been explained.

Trioecia; from τρεις, three, and οικος, a house; because the polygamy is on three distinct plants, one producing male flowers, another female, and a third hermaphrodite or androgynous.

The Class *Cryptogamia* contains the orders of

Filices, or ferns;

Musci, or mosses;

Algæ, or flags;

Fungi, or mushrooms.

This short explanation of the Linnæan system has been introduced, in order to convey a general idea to medical students of its nature, and also the meanings of the several terms.

The various medicinal plants will be found systematically arranged under the title *Materia medica*.

Seydschutz water. See *Sedlitz water.*

Shaddock. A variety of orange.

Shallot. A species of onion.

SHARP, Samuel, an able and distinguished surgeon in the middle of the last century, was a pupil of Cheselden, and afterwards studied with great zeal at Paris.

He is said to have commenced his profession rather late in life; nevertheless after settling in London, and becoming surgeon to Guy's hospital, his genius and assiduity soon procured him great celebrity and extensive practice. He was elected a Fellow of the Royal Society, and a Member of the Academy of Surgery at Paris. He contributed to the improvement of his art by two valuable publications, which passed through many editions, and were translated into several foreign languages. The first of these was a "Treatise on the Operations of Surgery," with an Introduction on the Nature and Treatment of Wounds, &c. The other work was entitled "A Critical Enquiry into the present State of Surgery," first printed in 1750.

Sharp-pointed dock. See *Rumex acutus.*

SHAW, Peter, a physician of considerable reputation in the early part of the last century. His first publication was entitled "New Practice of Physic," in two volumes, 1726; containing a brief Description of Diseases, and their Treatment. He then published an "Enquiry into the Virtues of the Scarborough Spaw Waters;" and about the same time his "Chemical Lectures," which was deemed a scientific work, and translated into French. He also edited the Edinburgh Dispensatory; and gave to the world some other minor publications.

Shedding-teeth. The primary or milk-teeth. See *Teeth.*

Shells, prepared. See *Testæ preparatæ.*

Sherbet. A compound liquor prepared for punch before the spirit is added.

Shingles. See *Erysipelas.*

SHRUB. A compound prepared from spirits, lemon-juice and sugar.

Si'agon. Σιαγων. The jaw.

Siagona'gra. (From σιαγων, the jaw, and αγρα, a seizure.) The gout in the jaw.

SIALAGOGUES. (*Medicamenta Sialagoga;* from σιαλον, saliva, and αγω, to expel.) Those medicines are so called, which excite an uncommon flow of saliva: such are mercurial preparations, pyrethrum, &c. They are divided into *sialagoga topica,* as scilla, nicotiana, piper, &c. and *sialogoga interna,* as the various preparations of mercury.

Sibbens. A disease resembling syphilis.

Sicca'ntia. (From *sicco,* to dry.) Drying medicines.

Siccha'sia. (From σικχος, weak, weary.) An unpleasant lassitude and debility peculiar to women with child.

Si'cula. (Dim. of *sica,* a short sword; so called from its dagger-like root.) The beet.

Sicye'don. (From σικυος, a cucumber.) A transverse fracture like a cucumber broken in two parts.

Sicyo'ne. (From σικυος, a cucumber or gourd; so named from its resemblance to a gourd.) A cucurbit.

Sidera'tio. (From *sidus,* a planet, because it was thought to be produced by the influence of the planets.) An apoplexy; a blast; a slight erysipelas.

Side'rium. (From σιδηρος, iron.) An herb so called from its supposed virtues in healing wounds made by iron instruments.

Sigesbe'ckia orienta'lis. The systematic name of a plant which is said to be useful in removing strangury, and in calculous diseases, gout, and fluor albus.

Sight. See *Seeing.*

Sigilla'ta te'rra. Sealed earth; a species of bolar earth made into cakes.

Sigi'llum bea'tæ mari'æ. Black briony.

Sigi'llum herme'ticum. An hermetic seal; made by closing the end of a glass tube by melting it.

Sigi'llum salomo'nis. (Dim. of *signum,* a sign. It is called *sigillum salominis,* Solomon's seal, beause it has upon its root the resemblance of an impression made by a seal.) See *Convallaria polygonatum.*

SIGMOID. (*Sigmoides,* from the Greek letter σιγμα, anciently written C, and ειδος, a likeness; resembling the Greek letter sigma.) Applied to the valves of the heart, and sometimes to the cartilages of the aspera arteria, or the semilunar apophysis of the bones.

Sigmoide'a flexu'ra. The sigmoid flexure, or turn of the colon.

Sigmoi'des proce'ssus. Valves of the heart.

Si'gna cri'tica. Signs of the crisis of disease.

Si'gna diagno'stica. Diagnostic or distinguishing signs.

Si'ler monta'num. Common hartwort. See *Laserpitium siler.*

SI'LEX. (*Selag,* Heb.) Silex, or siliceous earth, is the principal constituent part of a very great number of the compound earths and stones forming the immense mass of the solid nucleus of the globe. It is the basis of almost all the scintillating stones, such as *flint, rock crystal, quartz, agate, calcedony, jasper,* &c. The sand of rivers and of the sea-shore, chiefly consist of it. It is deposited in vegetable substances forming petrified wood, &c. It is likewise precipitated from certain springs in a stalactical form. It has been discovered in several waters in a state of solution, and is found in many plants, particularly grasses and equisetums. Professor Davy has proved that it forms a part of the epidermis of these vegetables. It is never met with absolutely pure in nature.

Properties. — Silex, when perfectly pure, exists in the form of a white powder. It is insipid and inodorous. It is rough to the touch, cuts glass, and scratches or wears away metals. Its specific gravity is about 2.66. It is unalterable by the simple combustible bodies. When mixed with water it does not form a cohesive mass. Its moleculæ when diffused in water are precipitated with the utmost facility. It is not acted on by any acid, except the fluoric. When in a state of extreme division it is soluble in alkalies; fused with them it forms glass. It melts with the phosphoric and boracic acids. It is unchangeable in the air, and unalterable by oxygen and the rest of the gazeous fluids. It has been considered as insoluble in water, but it appears when in a state of extreme division to be soluble in a minute quantity.

Method of obtaining Silex. — Silex may be obtained, tolerably pure, from flints, by the following process: Procure some common gun-flints; expose them in a crucible to a red heat, and then plunge them into cold water; by this treatment they will become brittle, and easily reducible to powder. Mix them, when pulverized, with three or four times their weight of carbonate of potash, and let the mixture be fused, in a dull red heat, in a silver crucible. We shall thus obtain a compound of alkali and silex, called siliceous potash. Dissolve this compound in water, filter the solution, and add to it diluted sulphuric or muriatic acid. An immediate precipitation now ensues, and as long as this continues, add fresh portions of acid. Let the precipitate subside; pour off the fluid that floats above it; and wash the precipitate with hot water till it comes off tasteless. This powder when dry is silex.

In this process the acid added to the solution of flint unites to the potash, and forms sulphate or muriate of potash; the siliceous earth is therefore precipitated.

It is necessary to add an excess of acid, in order that all the foreign earths which are present may be separated.

If the solution of flints be diluted with a great quantity of water, as for instance, in the proportion of 24 parts to one, and in this state an acid be poured upon it, no perceptible precipitation will ensue; the silex continues suspended in the fluid, and is invisible on account of its transparency; but it may be made to appear by evaporating part of the water.

The solution of flint, on account of its affinity with the carbonic acid is also in course of time decomposed by mere contact with air.

Another method of obtaining silex exceedingly pure is to separate it from fluoric acid.

SI'LICA. (From *silex.*) Siliceous earth. See *Silex.*

Siligo. Σιλιγνις. Fine wheat or rye.

Si'liqua. (From *silo*, a nose turned up, a hooked nose.) A pod or receptacle for seed, consisting of two valves, and in which the seeds are fixed alternately to each suture. Also some plants which bear pods.

Si'liqua du'lcis. Sweet-pod. The fruit so called is the produce of the *Ceratonia siliqua*, of Linnæus; which see.

Si'liqua hirsu'ta. The cowage is sometimes so called. See *Dolichos.*

Siliqua'strum. (From *siliqua*, a pod; named from its pods.) Judas-tree. The capsicum or Guinea-pepper was so termed by Pliny. See *Capsicum.*

Siliquo'sa in'dica. An American plant; its juice is alexipharmic.

Silk-worm, acid of. See *Bombic acid.*

Si'lphium. (*Zalaph*, Arab.) Assafœtida, or the plant which affords it.

SILVER. *Argentum.* This metal is found both native and mineralized, and combined with lead, copper, mercury, cobalt, sulphur, arsenic, &c. The principal ores of this metal are the following: — Native silver, antimoniated silver, sulphuret of silver, sulphuretted oxyde of silver and antimony, muriate of silver, native oxyde of silver, &c. It is found in different parts of the earth. The mines of the Erzgebürge or the metalliferous rocks of Mexico and Potosi, Bohemia, Norway, Transylvania, &c. are the richest.

Native silver possesses all the properties of this metal, and it appears in series of octahedra inserted in one another; in small capillary flexible threads intwined together; in plates; or in masses. The colour of native silver is white, often tarnished. Silver alloyed with gold forms the *auriferous native silver ore.* The colour of this ore is a yellowish white. It has much metallic lustre. The *antimoniated silver ore* belongs to this class. Silver combined with sulphur, forms the *sulphuretted oxyde of silver*, or *vitreous silver ore.* This ore occurs in masses, sometimes in threads, and sometimes crystallized in cubes or regular octahedra. Its colour is dark blueish grey, inclined to black. Its fracture is uneven, and its lustre metallic. It is soft enough to be cut with a knife. It is sometimes found alloyed with antimony (grey silver ore.) Silver united to muriatic acid forms the *corneous silver ore* (*muriate of silver*) which appears under different colours and shapes. Silver united to oxygen constitutes the *calciform silver ore*, of which there are several varieties. The colour of these ores is a lead grey, or greyish black. They occur massive, disseminated, and crystallized.

Germany, and other countries of Europe, but more especially Peru and Mexico in South America, contain the principal silver mines. There are, however, silver mines in Ireland, Norway, France, and many other parts of the world.

Properties. — Pure silver is very brilliant, white and sonorous. It is the most splendid of all the metals. Its specific gravity is from 10.474 to 11.091, according to the state of its density. It is exceedingly ductile and tenacious. It may be beat out into leaves only the one hundred and sixty thousandth part of an inch thick, and drawn into wire the thousandth part of an inch thick. It melts at 28° of Wedgwood's pyrometer. Exposed to a temperature considerably higher it becomes volatilized. Atmospheric air has no effect upon it, except when it contains sulphurous vapours, sulphuretted or phosphuretted hydrogen gases. It unites to phosphorus and sulphur. It slightly unites with the brittle acidifiable metals; but it readily enters into combination with the greater number of the other metals. With gold it forms what is termed *green gold.* Copper renders it harder without much impairing its ductility. Mercury and silver combine and form a crystallizable and fusible alloy. It unites with the rest of the metals except cobalt and nickel. It is oxydized and dissolved by several of the acids. The nitric acid attacks it rapidly in the cold. The sulphuric acid requires a boiling heat. The muriatic acid does not act upon it. The acid solutions of silver are decomposable by the alkalies, earths, and by the greater number of the metals.

Method of obtaining Silver. — Different methods are employed in different countries to extract silver from its ores. In Mexico, Peru, &c. the mineral is pounded, roasted, washed, and then triturated with mercury in vessels filled with water. A mill is employed to keep the whole in agitation. The silver combines by that means with the mercury. The alloy thus obtained is afterwards washed, to separate any foreign matters from it, and then strained and pressed through leather. This being done, heat is applied to drive off the mercury from the silver, which is then melted and cast into bars or ingots.

In order to extract silver from sulphuretted or vitreous silver ore, the mineral is roasted, and then melted with lead and borax, or some other flux to assist the fusion. By the first operation the sulphur is volatilized, and by the second the silver is obtained, though for the most part alloyed with other metals, from which it is separated by cupellation, or fusion with lead or bismuth.

Silver is a perfect metal, of a white colour, and of the most lively brilliancy; next to gold, the most malleable of all metals. It is sometimes found pure, but for the most part in combination with tin or lead. It has neither taste nor smell; its specific gravity is such, that it loses about the eleventh part of its weight by immersion in water; and a cubic foot of this metal weighs 270 pounds. Native silver is found in the greatest abundance in Peru and Mexico. From this metal is obtained the officinal *argenti nitras.*

Silver-weed. See *Potentilla anserina.*

Simarou′ba. (A patronymic name of America.) See *Quassia simarouba.*

Simarou′bæ infu′sum. See *Infusum simaroubæ.*

Si′miæ la′pis. See *Bezoar simiæ.*

Simple substances. See *Elements.*

Si′mplex o′culus. A bandage for the eye.

SINA′PE. See *Sinapis.*

Sinapelæ′um. (From σιναπι, mustard, and ελαιον, oil.) Oil of mustard.

Sina′peos se′men. Mustard-seed.

Sina′pi ni′grum. See *Sinapis.*

SINA′PIS. (Οτι σινει τους ωπας, because it hurts the eyes.) *Eruca. Napus.*

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.* Mustard.

2. The pharmacopœial name of the black mustard. See *Sinapis nigra.*

Sina′pis a′lba. The systematic name of the white mustard plant, which is directed for medicinal use in the Edinburgh pharmacopœia. It is somewhat less pungent than the black species. See *Sinapis nigra.*

Sina′pis ni′gra. The systematic name of the common black mustard. *Napus. Eruca. Sinape. Sinapi.* Common black mustard. *Sinapis nigra; siliquis glabris racemo appressis,* of Linnæus. The seeds of this species of mustard, which are directed by the London College, and those of the *Sinapis alba,* which are preferred by that of Edinburgh, manifest no remarkable difference to the taste, nor in their effects, and therefore answer equally well for medicinal and culinary purposes. They have an acrid, pungent taste, and, when bruised, this pungency shows its volatility by powerfully affecting the organs of smell. Mustard is considered as capable of promoting appetite, assisting digestion, attenuating viscid juices, and, by stimulating the fibres, it proves a general remedy in paralytic affections. Joined to its stimulant qualities, it frequently, if taken in considerable quantity, opens the body, and increases the urinary discharge, and hence it has been found useful in dropsical complaints. Externally, flower of mustard is frequently used mixed with vinegar as a stimulant or sinapism.

Sina′pis se′men a′lbum. White mustard-seed.

Sina′pis se′men ni′grum. See *Sinapis.*

SINAPI′SMUS. *Sinapismum. Cataplasma sinapios.* A sinapism or mustard poultice. A term given to a mixture of mustard and vinegar in form of poultice, generally applied to the calves of the legs, or soles of the feet as a stimulant, and employed in low states of fevers and other diseases, and intended to supersede the use of a blister. See *Cataplasma sinapis.*

Sina′pium. (From σιναπι, mustard.) An infusion or decoction of mustard-seed.

SI′NCIPUT. The fore part of the head. See *Caput.*

Si′ne pa′ri. Several muscles, veins, arteries, &c. are so called which are without a fellow. See *Azygos.*

SINGU'LTUS. *Lygmos.* The hiccough. A convulsive motion of the diaphragm and parts adjacent.

SI'NUS. 1. A cavity or depression.

2. In surgery it means a long, narrow, hollow track, leading from some abscess, diseased bone, &c.

3. The veins of the dura mater are so termed. They are several in number, the principal of which are, 1. The *longitudinal sinus,* which rises anteriorly from the crista galli, ascends and passes between the two laminæ of the falciform process to where this process ends. It then opens into, 2. *Two lateral sinuses,* distinguished into right and left, which lie in the crucial spine of the os occipitis: 3. The *inferior longitudinal,* which is a small sinus situated at the acute inferior margin of the falx.

Si'nus co'xæ. The acetabulum.

Si'nus ge'næ pituita'rius. See *Antrum of Highmore.*

SI'NUS LONGITUDINA'LIS. See *Longitudinal sinus.*

SI'NUS MAXILLA'RIS. The antrum of Highmore. A cavity in the cheek.

Si'nus mulie'bris. Sinus pudoris. The vagina.

SI'NUS VE'NÆ PORTA'RUM. The entrance into the liver.

SINUSES LATERAL. See *Lateral sinuses.*

Si'philis. See *Syphilis.*

Sipho'nia ela'stica. The systematic name of the elastic resin-tree. See *Indian rubber.*

Siri'asis. (From σιρος, a cavity.) An inflammation of the brain peculiar to children, and attended with a hollowness of the eyes and depressure of the fontanella.

Si'rium myrtifo'lium. The systematic name of the tree which is supposed by some to afford the yellow saunders. See *Santalum album.*

Si'sarum. (*Sisa,* Heb.) Siser or skirret.

Si'ser. See *Sisarum.*

SISON. The name of a genus of plants. Class, *Pentandria.* Order, *Monogynia.*

Si'son a'mmi. The systematic name of the plant which affords the ammi verum of the shops. The seeds of this plant, *Sison, foliis tripinnatis, radicalibus linearibus, caulinis setaceis, stipularibus longioribus,* of Linnæus, have a grateful smell, somewhat like that of origanum, and were formerly administered as a carminative.

SISY'MBRIUM. (From σισυνβος, *fringe;* so named from its fringed roots.) The name of a genus of plants in the Linnæan system. Class, *Tetradynamia.* Order, *Siliquosa.* The water-cress.

Sisy'mbrium nastu'rtium. The systematic name of the water-cress. *Nasturtium aquaticum. Laver odoratum. Crateva sium. Cressi. Cardamines.* Water-cress. This indigenous plant, *Sisymbrium siliquis declinatis, foliis pinnatis, foliolis subcordatis,* of Linnæus, grows plentifully in brooks and stagnant waters. The leaves have a moderately pungent taste, emit a quick penetrating smell, like that of mustard-seed, but much weaker. Water-cresses obtain a place in the Materia Medica, for their antiscorbutic qualities, which have been long very generally acknowledged by physicians. The most pleasant way of administering them is in form of a salad.

Sisy'mbrium so'phia. The systematic name of the herb sophia. *Sophia chirurgorum.* This plant is now almost banished from practice. It was formerly in high estimation in the cure of wounds. It has been given internally in hysterical affections and uterine hæmorrhages, and the seeds are said to be efficacious in destroying intestinal worms.

SITIOLOGY. (*Sitiologia.* From σιτος, aliment, and λογος, a discourse or treatise.) A doctrine or treatise on aliment.

SI'UM. (From σειω, to move, from its agitation in water.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the creeping water-parsnep.

Si'um aroma'ticum. The amomum is sometimes so called.

Si'um ni'nsi. The systematic name of the plant whose root is called *radix ninsi* in some pharmacopœias. *Ninzin. Nindsin.* This root was long supposed to be the same as ginseng. It now appears, however, to be the produce of this plant. It possesses similar, though weaker properties, than ginseng.

Si'um nodiflo'rum. The systematic name of the creeping water-parsnep. *Sium nodiflorum,* of Linnæus. This plant was admitted into the London pharmacopœia in the character of an antiscorbutic. It is not nauseous, and children take it readily if mixed with milk.

SKELETON. (*Sceletus,* from σκελλω, to dry.) When the bones of the body are preserved in their natural situation, and deprived of the flesh, the assemblage is called a skeleton. See *Bone.*

Skeleton artificial. The assemblage of all the bones of the animal, when hung in their respective situations by means of wire. See *Bone.*

Skeleton, natural. A skeleton is so termed in opposition to an artificial one, when the bones are retained in their proper places by means of their natural ligaments.

SKIN. (*Δερμις. Pellis. Cutis.*) When carefully dissected off and separated from all adventitious matter in a middle-sized man, it weighs about four pounds and a half.

The skin, though apparently a simple membrane, is in reality laminated, consisting of several subdivisions; the outermost lamina is termed with us scarf skin, or cuticle; the second has no English name, is known only to anatomists, and is called *rete mucosum;* after these two are removed we come to, as is commonly thought, the surface of the skin itself.

When a blister has been applied to the skin of a Negro, if it has not been very stimulating, in twelve hours after a thin transparent greyish membrane is raised, under which we find a fluid. This membrane is the cuticle or scarf skin. When this, with the fluid, is removed, the surface under them appears black; but if the blister had been very stimulating, another membrane, in which this black colour resides, would also have been raised with the cuticle; this is the rete mucosum, which is itself double, consisting of another grey transparent membrane, and of a black web, very much resembling the *nigrum pigmentum* of the eye. When this membrane is removed, the surface of the true skin (as has hitherto been believed) comes in view, and is white, like that of a European. The *rete mucosum* gives the colour to the skin; is black in the Negro; white, brown, or yellowish, in the European. The reason why this membrane is black in the Negro is, perhaps, that his body may be better able to defend itself against the sun's rays, and that the heat may be prevented from penetrating. The intention of a similar membrane behind the retina in the eye, appears to be not only that of absorbing the superfluous rays of light; but, like the *amalgam* behind the looking-glass, it may enable the retina to reflect the rays, in order to perfect vision. It is not very improbable that some such purpose, as enabling the cuticle to reflect the sun's rays in those warm climates, where the inhabitants originally go naked, may be the intention of nature, in giving them the black membrane. Perhaps, too, the circumstance of the countenance's becoming brown, when exposed to the sun's rays in summer, in our own climate, may be a process of nature to defend herself against the access of external heat into the body.

Both cuticle and *rete mucosum* send innumerable processes into the pores of the true skin; the process of the *rete mucosum* is always within that of the cuticle, and in contact with the sides of the pore, as formed by the true skin. These processes are remarkable in the cuticle and *rete mucosum* of the elephant, some of them are almost an inch long; the cuticle, or *rete mucosum*, or a membrane very similar, having the same properties with these, appears to be also continued into the inside of the mouth, over the tongue, internal surface of the lungs, œsophagus, stomach, and intestinal tube. In most of the last-named parts, the cuticle, however, forms sheaths for *villi*, and not processes which line pores. On viewing the surface of the skin, even with the naked eye, we find it porous; more so in some places than in others; and the pores are also larger in some parts than others. Some of these pores are ducts of sebaceous glands, and others serve not only to transmit hairs, but, it is supposed, the greatest part of the perspirable matter itself. Absorption on the skin also, in all probability, begins on the sides of these pores. They are particularly remarkable about the mouth, nose, palms of the hands, soles of the feet, external ear, scalp, *mons veneris*, and around the nipple in women.

The skin itself was given to man not only for feeling in a general sense, but for perspiration, absorption, and particularly for *touch*, in which he excels all other animals, and which resides, principally in the *tips of the fingers*. He was intended for examining, reasoning, forming a judgment, and acting accordingly; he was fitted by this sense to examine accurately the properties of surrounding bodies, not capable of being examined by his other senses. This, among other reasons, was one why he was made erect, that the point of his fingers should not be made callous, or less sensible, *by walking on them.*

The skin of human bodies is always of a white colour, in the dead body, let the colour of the *rete mucosum* be what it may, it is extremely full of pores, and extremely vascular; a child in full vigour comes into the world from this circumstance, *scarlet;* it is endowed with intense sensibility: almost all the pain, in the different operations of surgery, is past when we have divided the skin. Some parts of the skin have more feeling than others; the lips, for example, as Haller says, "*ad basia destinata.*" The *glans clitoridis*, and the *glans penis*, with a similar intention; there, though the nerves are not so large as in some other parts, they are longer, more numerous, and endowed with more exquisite feeling, but where the common offices of life merely are intended, the marks of superior feeling or touch, in the skin, are the projections, above the common surface, of those packets of arteries, veins, and absorbents, called *villi;* the nerves are there not only also longer, but larger, as in the points of the fingers and toes.

We are not certain that the skin is muscular, but it has properties very like those of muscle, it contracts, relaxes, and even vibrates in some places, on certain occasions. It is extremely distensible, the skin of the *perinæum* has stretched in labour from a quarter of an inch to six inches. It is also extremely elastic, and instantly after labour has returned again to the original quarter of an inch; it is thickest on those parts intended by nature to bear weight or pressure; of course it is thickest on the back, on the soles of the feet, and palms of the hands. It is thinner on the fore part of the body, on the insides of the arms and legs, and where its surfaces touch opposite surfaces. It is extremely thin on the lips, and allows the colour of the blood to shine through it. It is also extremely thin on the *glans penis* in men, *glans clitoridis* in women, and on the inside of the *labia pudendi*. Skin dried and dressed is extremely strong and durable, and therefore employed in making harness for horses, clothing for men, and a variety of other purposes.

Skin, scarf. See *Cuticle* and *Skin*.

Skink. See *Scincus*.

SKULL. The skull or *cranium* is that boney box which contains the brain: it forms the forehead, and every part of the head except the face. It consists of eight bones, namely, one os frontis, one os occipitis, one os sphenoides, one os ethmoideum, two ossa temporalia, and two ossa parietalia.

Slaters. See *Oniscus asellus*.

SLEEP. *Somnus.* That state of the body in which the internal and external senses and voluntary motions are not exercised. The end and design of sleep is both to renew, during the silence and darkness of the night, the vital energy which has been exhausted through the day, and to assist nutrition.

Sloe. See *Prunus sylvestris*.

Smallage. See *Apium*.

Small-pox. See *Variola*.

SMELLIE, William, was born in Scotland, where he practised midwifery for nineteen years, and then settled in London. He attained considerable reputation as a lecturer, which he appears to have merited by his assiduity and talents. He introduced many improvements in the instruments employed in that branch of the profession, and established some useful rules for their application. He was the first writer who, by accurately determining the shape and size of the pelvis, and of the head of the fœtus, and considering its true position in utero, clearly pointed out the whole progress of parturition: and his opinions were subsequently confirmed, especially by his pupil, the celebrated Dr. W. Hunter. He abolished many superstitious notions, and erroneous customs, that prevailed in the management of parturient women, and of the children; and had the satisfaction of seeing most of these improvements adopted, as well in this, as in other countries of Europe. In 1752 he published the substance of his lectures, in an octavo volume; to which he added, two years after, a second volume of cases; and a third appeared, about five years after his death, in 1768. In 1754 he also published a set of anatomical plates, of a large folio size, to elucidate his doctrines farther.

SMELLING. The sense of smelling is performed by means of a soft, pulpy, vascular, papillous, porous membrane, which lines the whole internal cavity of the nostrils, and is thicker upon the septum, and principal cavity of the nose, but thinner in the sinuses. It is plentifully supplied with very soft nerves, the middle of which descend from the first pair, through the holes of the os cribrosum to the septum narium; but in such a manner, that it is very difficult to trace them to their extremities, and into the septum. Other lateral nerves come from the second branch of the fifth pair and its branches, from that which crosses the pterygoid canal, and from another which descends through the canals of the palate; and in the maxillary sinus from the infra-orbital branch, from the dental branch, and from the anterior nerve of the palate. The anterior part of the septum has a twig from the ophthalmic, or first branch of the fifth pair.

The nostrils are supplied with very numerous arteries; from the three nasal branches of the internal maxillary, above, both from the ethmoidal branches, and the frontal and nasal branches; with lateral arteries from the smaller ophthalmic branch of the internal carotid, and from branches of the palatine artery, and in the sinuses from the infra-orbital, and from the superior dental one. These arteries have the property of exuding blood easily, and in great quantity, without any lesion of consequence. The correspondent veins form a very large plexus upon the external pterygoid muscle; then communicate with the sinuses of the dura mater; and, lastly, meet in the external branch of the internal jugular. The arteries supply nourishment, warmth, and mucus.

The air, filled with the very subtile, invisible, pungent, oily, saline, and volatile effluvia, which exhale from almost every known body, being received into the nostrils, by the action of respiration, and by a peculiar effort for drawing the air into them, carries these particles to the nerves, widely naked, and constantly soft. By these there is excited in the nerves a kind of sensation which we call smell, by which we distinguish the several kinds of oils and salts, in a manner somewhat indistinct, difficultly reducible to classes, difficultly recalled to the memory, nevertheless sufficiently for our purposes. This sense informs us of unwholesome putridity, of excessive acrimony, and of the bland and useful nature of substances. And as salt, united with oil, is an object of taste, and as oils, combined with salts, constitute odours, the affinity of the two senses, which is necessary to derive utility from either is apparent. But volatile particles chiefly are distinguished by smell, and fixed ones by the taste; perhaps because the thick mucous cuticle, spread over the tongue intercepts the action of the more subtile salts, which easily affect the softer and less covered nerves of the nostrils. We are ignorant of the reasons why some smells please, and others displease; perhaps custom may have some influence in this respect.

The action of smells is strong, but of short continuance; because particles in a very minute state are applied to naked nerves in the immediate vicinity of the brain. Hence the deleterious and also the refreshing action of odours, by which people are resuscitated from faintings, and even from drowning. Hence the violent sneezing, excited by acrid particles, the evacuation of the bowels, by the smell of purgatives, and the power of antipathies. Hence the pernicious effects of excessive sneezing, more especially blindness from the great sympathy of the nerves. Amongst the various parts of the nostrils, the septum, and the ossa turbinata, and their anterior portions, especially form the organ of smell: since these parts are multiplied in quick-scented animals, forming beautiful spires in quadrupeds; and in fish, being distributed in parallel laminæ elegantly toothed.

SMI'LAX. (From σμιλευω, to cut; so called from the roughness of its leaves and stalk.) The name of a genus of plants in the Linnæan system. Class, *Dioecia*. Order, *Octandria*. Rough bind-weed.

SMI'LAX CHI'NA. The systematic name of the China root tree. *China. China orientalis. Sankira. Guaquara. Smilax aspera Chinensis.* China root. It was formerly in esteem, as sarsaparilla now is, in the cure of the venereal disease, and cutaneous disorders.

Smilax, Chinese. See *Smilax china.*

SMI'LAX SARSAPARI'LLA. The systematic name of the plant which affords the sarsaparilla. *Sarsaparilla. Smilax aspera Peruviana. Sarsa. Carivillandi. Iva pecanga. Macapatli. Zarza. Zarzaparilla. Salsaparilla. Zarcaparilla.* The root of this plant, *Smilax; caule aculeato angulato, foliis inermibus ovatis retuso mucronatis trinerviis,* of Linnæus, has a farinaceous, somewhat bitter taste, and no smell. About two centuries ago it was introduced into Spain, as an undoubted specific in syphilitic disorders; but owing to difference of climate, or other causes, it has not answered the character which it had acquired in the Spanish West Indies. It is now considered as capable of improving the general habit of body, after it has been reduced by the continued use of mercury.

To refute the opinion that sarsaparilla possesses antisyphilitic virtues, Mr. Pearson, of the Lock Hospital, divides the subject into two distinct questions. 1. Is the sarsaparilla root, when given alone, to be safely relied on in the treatment of lues venerea? The late Mr. Bloomfield, his predecessor, and during some years his colleague at the Lock Hospital, has given a very decided answer to this question: "I solemnly declare," says he, "I never saw a single instance in my life where it cured that disorder without the assistance of mercury, either at the same time with it, or when it had been previously taken before the decoction was directed." Mr. Pearson's experience, during many years, coincides entirely with the observations of Mr. Bloomfield. He has employed the sarsaparilla, in powder and in decoctions, in an almost infinite variety of cases, and feels himself fully authorised to assert, that this plant has not the power of curing any one form of the lues venerea. The sarsaparilla, indeed, like the guaiacum, is capable of alleviating symptoms derived from the venereal virus; and it sometimes manifests the power of suspending, for a time, the destructive ravages of that contagion; but where the poison has not been previously subdued by mercury, the symptoms will quickly return; and, in addition to them, we often see the most indubitable proofs that the disease is making an actual progress, during the regular administration of the vegetable remedy.

2. When the sarsaparilla root is given in conjunction with mercury, does it render the mercurial course more certain and efficacious? In replying to this query, it is necessary to observe that the phrase, "to increase the efficacy of mercury," may imply, that a smaller quantity of this mineral antidote will confer security on an infected person, when sarsaparilla is added to it; or it may mean, that mercury would be sometimes unequal to the cure, without the aid of sarsaparilla. If a decoction of this root did indeed possess so admirable a quality, that the quantity of mercury, necessary to effect a cure might be safely reduced, whenever it was given during a mercurial course, it would form a most valuable addition to our Materia Medica. This opinion has been, however, unfortunately falsified by the most ample experience, and whoever shall be so unwary as to act upon such a presumption, will be sure to find his own and his patient's expectations egregiously disappointed.

If the sarsaparilla root be a genuine antidote against the syphilitic virus, it ought to cure the disease when administered alone; but, if no direct proof can be adduced of its being equal to this, any arguments founded on histories where mercury has been previously given, or where both the medicines were administered at the same time, must be ambiguous and undecisive.

It appears probable, that Sir William Fordyce, and some other persons, entertained a notion, that there were certain venereal symptoms which commonly resisted the potency of mercury, and that the sarsaparilla was an appropriate remedy in these cases. This opinion, it is presumed, is not correct, for it militates against all Mr. P. has ever observed of the progress and treatment of lues venerea. Indeed those patients who have lately used a full course of mercury, often complain of nocturnal pains in their limbs; they are sometimes afflicted with painful enlargements of the elbow and knee-joints; or they have membranous nodes, cutaneous exulcerations, and certain other symptoms, resembling those which are the offspring of the venereal virus.

It may and does often happen, that appearances like these are mistaken for a true venereal affection, and, in consequence of this error, mercury is administered, which never fails to exasperate the disease. Now, if a strong decoction of sarsaparilla root be given to persons under these circumstances, it will seldom fail of producing the most beneficial effects; hence it has been contended, that symptoms derived from the contagion of lues venerea, which could not be cured by mercury, have finally yielded to this vegetable remedy. It must be acknowledged, that representations of this kind have a specious and imposing air; nevertheless, Mr. Pearson endeavours to prove, that they are neither exact nor conclusive. If any of the above-named symptoms should appear near the conclusion of a course of mercury, when that medicine was operating powerfully on the whole system, it would be a strange and inexplicable thing if they could possibly be derived immediately from the uncontrolled agency of the venereal virus.

This would imply something like a palpable contradiction, that the antidote should be operating with sufficient efficacy to cure the venereal symptoms, for which it was directed, while, at the same time the venereal virus was proceeding to contaminate new parts, and to excite a new order of appearances.

One source, and a very common one, to which some of the mistakes committed upon this subject may be traced, is a persuasion that every morbid alteration which arises in an infected person is actually tainted with the venereal virus, and ought to be ascribed to it as its true cause.

Every experienced surgeon must, however, be aware, that very little of truth and reality exists in a representation of this kind. The contagious matter, and the mineral specific, may jointly produce, in certain habits of body, a new series of symptoms, which, strictly speaking, are not venereal, which cannot be cured by mercury, and which are sometimes more to be dreaded than the simple and natural effects of the venereal virus.

Some of the most formidable of these appearances may be sometimes removed by sarsaparilla, the venereal virus still remaining in the system; and, when the force of that poison has been completely subdued by mercury, the same vegetable is also capable of freeing the patient from what may be called the sequelæ of a mercurial course.

The root of the sarsaparilla is sometimes employed in rheumatic affections, scrofula, and cutaneous complaints, where an acrimony of the fluids prevails.

Smy'rnion horte'nse. The masterwort has been so termed. See *Imperatoria.*

SMY'RNIUM. (So called from σμυρνα, myrrh, the smell of the seed resembling that of myrrh very much.) The name of a genus of plants. Class, *Pentandria.* Order, *Digynia.*

Smy'rnium olusa'trum. The systematic name of the plant called Alexanders. *Hipposelinum. Smyrnium. Macerona. Herba Alexandrina. Grielum agrioselinum.* Common Alexanders. This plant was formerly cultivated in our gardens, for culinary use, but is now superseded by celery. These seeds are bitter and aromatic, and the roots are more powerfully bitter. They stand recommended as resolvents, diuretics, and emmenagogues, though seldom used in medical prescriptions.

Snail. See *Limax.*

Snail-seeded glasswort. See *Salsola kali.*

Snakeroot, Virginian. See *Aristolochia Serpentaria.*

Snakeweed. See *Polygonum bistorta.*

Snakewood. See *Colubrinum lignum.*

Sneezewort. See *Achillea ptarmica.*

SNEEZING. A convulsive action of the muscles of the chest from irritation of the nostrils.

Snuff. See *Nicotiana.*

Soap. See *Sapo.*

Soap-berry. See *Sapindus saponaria.*

Soapwort. See *Saponaria.*

Socotorine aloës. An epithet of the best aloës which are brought from Socotora. See *Aloë.*

SO'DA. (An Arabian word.) The name now generally given by chemists and phsyicians to the mineral alkali.

It is obtained from several sources, but principally from plants growing on the sea coast. It occurs in the mineral kingdom, united with sulphuric, muriatic, and boracic acids; it is also found in large quantities in Egypt, combined with carbonic acid. It appears to be deposited in large impure masses, under the surface of the earth, in various countries, from which it is extracted by running waters. Thus it is found after the spontaneous evaporation of the water, mixed with sand in the bottom of lakes in Hungary; in the neighbourhood of Bilin in Bohemia; and in Switzerland. It occurs also in China, and near Tripoli, in Syria, Egypt, Persia, and India. It frequently oozes out of walls and crystallizes on their surface. Like potash, it is procured by lixiviation from the ashes of burnt plants, but only from those which grow upon the sea shores. The variety of plants employed for this purpose is very considerable. In Spain, soda is procured from different species of the *salsola* and *salicornia*, and the *batis maritima*. The *zostera maritima* is burnt in some places on the borders of the Baltic. In this country we burn the various species of *fuci;* and in France they burn the *chenopodium maritimum*.

The alkali thus procured is more or less pure according to the nature of the particular plant from which it is obtained. The greatest part, however, is a subcarbonate of soda. See *Soda impura*.

In order to obtain it in a state of purity, the subcarbonate of soda must be treated, like the potash of commerce, with lime and ardent spirit.

Properties of Soda. — Soda differs particularly from potash by the following properties: — In the fire it is rather more fusible. When exposed to the contact of the air it attracts water and carbonic acid, but it does not liquefy like potash, it merely acquires a pasty consistence, and at last crumbles into powder. It is not altered by light. It attracts sulphur and sulphuretted hydrogen more feebly. It adheres less strongly to the acids. It fuses and dissolves alumine more easily. All its other properties, its volatization by a very high degree of heat, its acrid causticity, its solubility, its combinations with sulphur, &c. resemble those of potash, though not exactly the same.

Sir H. Davy, having discovered the composition of potassa, submitted soda likewise to the same modes of analysis, and discovered that it too contains a substance of very singular properties, analogous to the base of potassa, though still essentially different from it, and that this base combined with oxygen forms soda.

When soda was submitted to the Galvanic action in the mode already described with regard to potassa, the results were similar, globules of a metallic appearance were produced at the negative surface, which often burnt at the moment of their formation, and sometimes exploded with violence, separating into smaller globules which darted through the air in a state of vivid combustion. When these were produced an aëriform fluid was disengaged at the positive surface, which proved to be pure oxygen. The reproduction of soda from this substance was similar to that of potassa from the base of that alkali. When the base of soda was exposed to the air, a crust of alkali formed on its surface, and oxygen was absorbed. When heated, confined in a portion of oxygen gas, a rapid combustion with a brilliant white flame took place, and soda was produced in the state of a solid white mass. The theory of the decomposition of soda is the same with that of potassa. The combustible base, like other combustible substances, is repelled by positively electrified surfaces, and attracted by negatively electrified surfaces; and the oxygen follows the contrary order. Hence their separation and evolution.

From the results of the combustion of the base of soda in oxygen gas, Sir H. Davy inferred that one hundred parts of soda consist of eighty of base and twenty of oxygen. From the results of its oxidation by the decomposition of water, the proportions were estimated to be seventy-seven of base and twenty-three of oxygen. The mean proportions of these two modes are 78.5, and 21.5. The base of soda therefore combines with rather a large proportion of oxygen than the base of potassa.

To the base of soda Sir H. Davy from its analogy to the metals has given the name of

SODIUM.

The following are its properties: —

Sodium is white, opaque, and, when examined under a film of naptha, has the lustre and general appearance of silver. It is exceedingly malleable, and is much softer than any of the common metallic substances. When pressed upon by a platina blade, with a small force it spreads into thin leaves, and a globule of the one-tenth or one twelfth of an inch in diameter is easily spread over a surface of a quarter of an inch, and this property does not diminish when it is cooled to 32° Fahrenheit.

It conducts electricity and heat in a similar manner to the basis of potassa; and small particles of it inflame by the Galvanic spark, and burn with bright explosions.

Its specific gravity is less than that of water. It swims in oil of sassafras of the specific gravity 1.096, water being one, and sinks in naptha of the specific gravity .861. By mixing together oil of sassafras and naptha, until a fluid was formed in which the globule of sodium remained at rest above or below, Sir H. Davy found its specific gravity to be to that of water nearly as nine to ten, or more accurately as .9348 to 1.

Sodium has a much higher point of fusion than potassium, its parts begin to lose their cohesion at about 120° Fahrenheit, and it is perfectly fluid at about 180°, so that it readily fuses under boiling naptha, it is also less volatile, it remains fixed in a state of ignition at the point of fusion of plate glass.

When sodium is exposed to the atmosphere it immediately tarnishes, and by degrees, becomes covered with a white crust, which deliquesces much more slowly than the substance that forms on the basis of potassa. This crust is pure soda.

The basis of soda combines with oxygen slowly without any luminous appearance, at common temperatures, and, when heated, this combination becomes much more rapid, but no light is emitted until it has acquired a temperature nearly that of ignition. The flame that it produces in oxygen gas is white, and it sends forth bright sparks, occasioning a very beautiful effect; in common air it burns with light of the colour of that produced during the combustion of charcoal, but much brighter.

When thrown upon water it produces a violent effervescence with a loud hissing noise, it combines with the oxygen of the water to form soda, which is dissolved, and its hydrogen is disengaged. In this operation there is no luminous appearance; but when it is thrown into hot water, the decomposition is more violent, and in this case a few scintillations are observed at the surface of the fluid, owing to small particles of the base, which are thrown out of the water sufficiently heated to burn in passing through the atmosphere. And when a globule is brought in contact with a small particle of water, or with moistened paper, the heat produced, (there being no medium to carry it off rapidly,) is usually sufficient for the accession of the sodium.

The base of soda, when thrown upon the strong acids, acts upon them with great energy. When nitrous acid is employed, a vivid inflammation is produced: with muriatic and sulphuric acid there is much heat generated, but no light. When plunged beneath the surface of the acids, it is rapidly oxigenated; soda is produced and combines with the acid.

Sodium, in its degrees of oxidation, has precisely similar habits with the base of potassa. When it is fused with dry soda in certain quantities, there is a division of oxygen between the alkali and the base, and a deep brown fluid is produced, which becomes a dark grey solid on cooling, and which attracts oxygen from the air, or which decomposes water, and becomes soda.

The same body is often formed in the analytic processes of decomposition, and it is generated when the basis of soda is fused in tubes of the purest plate glass.

Sodium, when heated with hydrogen gas, does not, like potassium, appear to be dissolved, and as no luminous appearance attends the oxidation of it in cold water, it does not appear to be capable of combining even with nascent hydrogen.

There is scarcely any difference in the visible phenomena of the agencies of the basis of soda, and that of potassa on sulphur, phosphorus, and the metals.

It combines with sulphur in close vessels filled with the vapour of naptha with great vividness, with light, heat, and often with explosion from the vaporization of a portion of sulphur, and the disengagement of sulphuretted hydrogen gas. The sulphuretted base of soda is of a deep grey colour. The phosphuret has the appearance of lead, and forms phosphate of soda by exposure to the air, or by combustion.

Sodium combines with the metals; in the quantity of one-fortieth, it renders mercury a fixed solid of the colour of silver, and the combination is attended with a considerable degree of heat. It makes an alloy with tin, without changing its colour, and it acts upon gold and lead when heated. In its state of alloy it is soon converted into soda by exposure to air, or by the action of water, which it decomposes with the evolution of hydrogen. The amalgam of mercury and sodium seems to form triple compounds with other metals. It likewise combines with sulphur, and forms a triple compound of a dark grey colour.

So'DA ACETA'TA. A neutral salt formed of a combination of acetic acid with the mineral alkali. Its virtues are similar to those of the acetate of potash.

So'DA BORAXA'TA. See *Borax.*

Soda, carbonate of. See *Sodæ carbonas.*

So'DA HISPA'NICA. See *Soda impura.*

So'DA HISPA'NICA PURIFICATA. See *Sodæ subcarbonas.*

So'DA IMPU'RA. Impure soda. *Soda. Barilla. Bariglia. Barillor. Anatron. Natron. Anaton. Nitrum antiquorum. Aphronitrum. Baurach. Sal alkalinus fixus fossilis. Carbonas sodæ impurus, Subcarbonas sodæ impura.* Soda. Barilla is the term given, in commerce, to the impure mineral alkali, or imperfect carbonate of soda, imported from Spain and the Levant. It is made by burning to ashes different plants that grow on the sea-shore, chiefly of the genus *salsola.* Many have referred it to the *Salsola kali,* of Linnæus; but various other plants, on being burned, are found to afford this alkali, and some in a greater proportion than this: these are,

The *Salsola sativa,* Lin. *Salsola sonda,* Lofling. *Kali hispanicum supinum annuum sedi-foliis brevibus. Kali d'Alicante.* This grows abundantly on that part of the Spanish coast which is washed by the Mediterranean sea. This plant is deservedly first enumerated by Professor Murray, as it supplies all the best soda consumed in Europe, which by us is called Spanish or Alicant soda, and by the Spanish merchants Barilla de Alicante.

Salsola soda, Lin. *Kali majus cochleato semine. Le Salicor.* This species, which grows on the French Mediterranean coast, is much used in Languedoc for the preparation of this salt, which is usually exported to Sicily and Italy.

Salsola tragus, Lin. affords an ordinary kind of soda, with which the French frequently mix that made in Languedoc. This adulteration is also practised by the Sicilians, who distinguish the plant by the term salvaggia.

Salicornia herbacea, Lin. is common in salt marshes, and on the sea-shore all over Europe. Linnæus prefers the soda obtained from this plant to that of all the others; but though the quantity of alkali which it yields is very considerable, it is mixed with much common salt.

Salicornia arabica, Lin. *Mesembryanthemum nodiflorum*, Lin. *Plantago squarrosa*, Lin. All these, according to Alpinus, afford this alkali. It has also been procured from several of the fuci, especially *F. vesiculosus*, and distinguished here by the name kelp. Various other marine plants might also be noticed as yielding an impure soda by combustion; but the principal are confined to the genus salsola, and that of salicornia. The salsola kali, on the authority of Rawolf, is the species from which the salt is usually obtained in eastern countries: which is brought to us in hard porous masses, of a speckled brown colour. Kelp, a still more impure alkali, made in this country by burning various sea-weeds, is sometimes called British barilla. The marine plants, collected for the purpose of procuring barilla in this country, are the salsola kali, salicornia Europæa, zostera maritima, triglochen maritimum, chenopodium maritimum, atriplex portulacoides et littoralis, plantago maritima, tamarix gallica, eryngium maritimum, sedum telephium, dipsacus fullonum, &c. &c.

It is to be regretted, that the different kinds of soda which are brought to European markets, have not been sufficiently analysed to enable us to ascertain with tolerable certainty the respective value of each; and, indeed, while the practice of adulterating this salt continues, any attempts of this kind are likely to prove fruitless. The best information on this subject is to be had from Jessica, Mascorelle, Cadet, Bolare, and Sestini. In those places where the preparation of soda forms a considerable branch of commerce, as on the coast of the Mediterranean, seeds of the salsola are regularly sown in a proper situation near the sea, which usually shoot above ground in the course of a fortnight. About the time the seeds become ripe, the plants are pulled up by the roots, and exposed in a suitable place to dry, where their seeds are collected; this being done, the plants are tied up in bundles, and burned in an oven constructed for the purpose, where the ashes are then, while hot, continually stirred with long poles. The saline matter, on becoming cold, forms a hard solid mass, which is afterwards broken in pieces of a convenient size for exportation.

According to chemical analysis, the impure sodas of commerce generally contain a portion of vegetable alkali, and neutral salts, as muriate of soda and sulphate of potash, and not unfrequently some portion of iron is contained in the mass; they are, therefore, to be considered as more or less a compound, and their goodness to be estimated accordingly. The Spanish soda, of the best sort, is in dark-coloured masses, of a blueish tinge, very ponderous, sonorous, dry to the touch, and externally abounding with small cavities, without any offensive smell, and very salt to the taste; if long exposed to the air, it undergoes a degree of spontaneous calcination. The best French soda is also dry, sonorous, brittle, and of a deep blue colour, approaching to black. The soda which is mixed with small stones, which gives out a fetid smell on solution, and is white, soft, and deliquescent, is of the worst kind.

So'DA MURIA'TA. See *Sodæ murias.*

So'DA MURIA'TICA. See *Sodæ murias.*

So'DA PHOSPHORA'TA. Phosphorated soda. *Alkali minerale phosphoratum*, of Bergman. This preparation is a compound of phosphoric acid and soda, and therefore called *phosphas sodæ* in the new chemical nomenclature. It is cathartic in the dose of half an ounce to an ounce; dissolved in gruel it is not unpleasant, and it is said to be useful, in scrophula, bronchocele, rachitis, and gout, in small doses.

Soda, subcarbonate of. See *Sodæ subcarbonas.*

Soda, subcarbonate of, dried. See *Sodæ subcarbonas exsiccata.*

Soda, sulphate of. See *Sodæ sulphas.*

So'DA TARTARIZA'TA. Tartarized soda, formerly known by the names of *sal rupellensis, sal polychrestum Seignetti,* and lately by that of *natron tartarizatum.* "Take of subcarbonate of soda twenty ounces; supertartrate of potash, powdered, two pounds; boiling water ten pints. Dissolve the subcarbonate of soda in the water, and add gradually the supertartrate of potash; filter the solution through paper, and evaporate it until a pellicle forms upon the surface; then set it by that crystals may form. Having poured away the water, dry these crystals upon bibulous paper." This salt consists of tartaric acid, soda, and potash, the soda only combining with the superabundant acid of the super salt; it is, therefore, a triple salt, and it has been judged by the London College more convenient to express this difference by the adjective *tartarizata*, than to introduce the three words necessary to its description. It possesses mildly cathartic, diuretic, and deobstruent virtues, and is administered in doses from one drachm to an ounce, as a cathartic, and in the dose of twenty to thirty grains in abdominal physconia, and torpidity of the kidneys. See *Seignette's salt*.

Soda, tartarized. See *Soda tartarizata*.

So′dæ bo′ras. Borate of soda. See *Borax*.

So′dæ carbo′nas. Carbonate of soda. "Take of subcarbonate of soda, a pound; subcarbonate of ammonia, three ounces; distilled water, a pint. Having previously dissolved the soda in water, add the ammonia, then by means of a sand bath apply a heat of 180° for three hours, or until the ammonia be driven off. Lastly, set the solution by to crystallize. The remaining solution may be evaporated and set by in the same manner that crystals may again form." This salt which is called also *aërated soda*, and *natron*, bears to the subcarbonate of soda the same relation that the carbonate of potash does to its subcarbonate. It is prepared in the same way, possesses the same comparative advantages, and contains, in like manner, double the quantity of carbonic acid.

So′dæ mu′rias. Muriate of soda. *Alkali minerale salinum. Sal communis. Sal culinaris. Sal fontium. Sal gemmæ. Sal marinus. Natron muriatum. Soda muriata.* Common culinary salt. This salt is more abundant in nature than any other. It is found in prodigious masses in the internal part of the earth, in Calabria, in Hungary, in Muscovy, and more especially Weilicska, in Poland, near Mount Capax, where the mines are very large, and afford immense quantities of salt. It is also obtained by several artificial means from sea-water. It possesses antiseptic, diuretic, and resolvent qualities, and is frequently employed in form of clyster, fomentation, lotion, pendiluvium, and bath, in obstipation, against worms, gangrene, scrophulous tumours, herpetic eruptions, arthritis, &c.

SO′DÆ SUBBO′RAS. See *Borax*.

So′dæ subcarbo′nas. Subcarbonate of soda, formerly called *natron præparatum* and *sal sodæ*. "Take of impure soda, powdered, a pound; boiling distilled water, half a gallon. Boil the soda in the water for half an hour, and strain the solution; let the solution evaporate to two pints, and be set by, that crystals may form. Throw away the remaining solution." The pure crystals, thus formed of Alicant barilla, are colourless, transparent, lamellated, of a rhomboidal figure; and one hundred parts are found to contain twenty of alkali, sixteen of aërial acid, and sixty-four of water; but upon keeping the crystals for a length of time, if the air be not excluded, the water evaporates, and they assume the form of a white powder. According to Inslin, one ounce of water, at the temperature 62° of Fahr. dissolves five drachms and fifteen grains of the crystals. This salt consists of soda imperfectly saturated with carbonic acid, and is, therefore called *sodæ subcarbonas*. It is given in doses of from ten grains to half a drachm as an attenuant and antacid; and joined with bark and aromatics, it is highly praised by some in the cure of scrophula. It is likewise a powerful solvent of mucus, a deobstruent and diuretic; and has been thought an antidote against oxyde of arsenic and corrosive sublimate. The other diseases in which it is administered are those arising from an abundance of mucus in the primæ viæ; calculous complaints, gout, some affections of the skin, rickets, tinea capitis, crusta lactea, and worms. Externally it is recommended by some in the form of lotion, to be applied to scrophulous ulcers.

So′dæ subcarbo′nas exsicca′ta. Dried subcarbonate of soda. "Take of subcarbonate of soda, a pound. Apply a boiling heat to the soda in a clean iron vessel, until it becomes perfectly dry, and constantly stir it with an iron rod. Lastly, reduce it into powder." Its virtues are similar to those of the subcarbonate.

So′dæ su′lphas. Sulphate of soda, commonly known by the name of *natron vitriolatum*, and formerly *sal catharticus Glauberi*. "Take of the salt which remains after the distillation of muriatic acid, two pounds. Boiling water, two pints and a half. Dissolve the salt in the water, then add gradually as much subcarbonate of soda as may be required to saturate the acid: boil the solution away until a pellicle forms upon the surface, and, after having strained it, set it by, that crystals may form. Having poured away the water, dry these crystals upon bibulous paper." It possesses cathartic and diuretic qualities, and is in high esteem as a mild cathartic. It is found in the mineral kingdom formed by nature, but that which is used medicinally is prepared by art. The dose is from one drachm to one ounce.

SOL. The sun. Gold was so called by the older chemists.

Sola′men. (From *solor*, to comfort.) Anise-seed is named solamen intestinorum, from the comfort it affords in disorders of the intestines.

Solano′ides. (From *solanum*, nightshade, and εἶδος, likeness.) Bastard nightshade.

SOLA′NUM. (From *solor*, to comfort, because it gives ease by its stupifying qualities.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*. Nightshade.

2. The pharmacopœial name of the *solanum nigrum*.

SOLA′NUM DULCAMA′RA. The systematic name of the bitter-sweet. *Dulcamara*. *Solanum scandens*. *Glycypicros, sive amaradulcis*. *Solanum lignosum*. *Στρυχνος*, of Theophrastus. Woody nightshade. *Solanum: caule inermi frutescente flexuosa; foliis superioribus hastatis; racemis cymosis*, of Linnæus. The roots and stalks of this nightshade, upon being chewed, first cause a sensation of bitterness, which is soon followed by a considerable degree of sweetness; and hence the plant obtained the name of bitter-sweet. The berries have not yet been applied to medical use; they seem to act powerfully upon the primæ viæ, exciting violent vomiting and purging. Thirty of them were given to a dog, which soon became mad, and died in the space of three hours; and, upon opening his stomach, the berries were discovered to have undergone no change by the powers of digestion; there can, therefore, be little doubt of the deleterious effects of these berries; and, as they are very common in the hedges, and may be easily mistaken, by children, for red currants, which they somewhat resemble, this circumstance is the more worthy of notice. The stipites, or younger branches, are directed for use in the Pharm. and they may be employed either fresh or dried, making a proportionate allowance in the dose of the latter for some diminution of its powers by drying. In autumn, when the leaves are fallen, the sensible qualities of the plant are said to be the strongest; and, on this account, it should be gathered in autumn rather than spring. Dulcamara does not manifest those strong narcotic qualities which are common to many of the nightshades; it is, however, very generally admitted to be a medicine of considerable efficacy. Murray says it promotes all the secretions; Haller observes, that it partakes of the milder powers of the nightshade joined to a resolvent and saponaceous quality; and the opinion of Bergius seems to coincide with that of Murray:—"Virtus: pellens urinam, sudorem, menses, lochia, sputa; mundificans." The diseases in which we find it recommended by different authors, are extremely various; but Bergius confines its use to rheumatisms, retentio mensium, et lochiorum. Dulcamara appears, also, by the experiments of Razoux and others, to have been used with advantage in some obstinate cutaneous affections. Dr. Cullen says, "We have employed only the stipites, or slender twigs of this shrub; but, as we have collected them, they come out very unequal, some parcels of them being very mild and inert, and others of them considerably acrid. In the latter state, we have employed a decoction of them in the cure of rheumatism, sometimes with advantage, but at other times without any effect. Though the dulcamara is here inserted in the catalogue of diuretics, it has never appeared to us as powerful in this way; for, in all the trials made here, it has hardly ever been observed to be in any measure diuretic." This plant is generally given in decoction, or infusion, and, to prevent its exciting nausea, it is ordered to be diluted with milk, and to begin with small doses, as large doses have been found to produce very dangerous symptoms. Razoux directs the following: ℞ Stipitum dulcam. rec. drac. ss ina quæ font. unc. 16 coquatur ad unc. 8. This was taken in the dose of three or four drachms, diluted with an equal quantity of milk, every four hours. Linnæus directs two drachms, or half an ounce of the dried stipites, to be infused half an hour in boiling water, and then to be boiled ten minutes; and of this decoction he gives two tea-cups full morning and evening. For the formula of a decoction of this plant, according to the London Pharm. see *Decoctum dulcamaræ*.

SOLA′NUM FŒ′TIDUM. The thorn-apple plant is sometimes so called. See *Datura stramonium*.

SOLA′NUM LETHA′LE. See *Atropa belladonna*.

SOLA′NUM LIGNO′SUM. The bitter-sweet is sometimes so termed. See *Solanum dulcamara*.

SOLA′NUM MELO′NGENA. The systematic name of the mad apple plant. Its oblong egg-shaped fruit are often boiled in their native places, in soups and sauces, the same as the love-apple; are accounted very nutritive, and are much sought after by the votaries of Venus.

SOLA′NUM NI′GRUM. The systematic name of the garden nightshade, which is highly deleterious.

SOLA′NUM SA′NCTUM. The systematic name of the Palestine nightshade. The fruit of which is globular, and in Egypt much eaten by the inhabitants.

SOLA′NUM TUBERO′SUM. *Batabas*. *Solanum esculentum*. *Kippa*. *Kelengu*. *Papas Americanus*. *Pappus Americanus Convolvulus Indicus*. The potatoe plant, a native of Peru. An extremely nutritious and wholesome vegetable. Potatoes were first brought into Europe by Sir Francis Drake, 1486, and planted in London.

SOLA′NUM VESICA′RIUM. The winter cherry plant is so called by Caspar Bauhin. See *Physalis alkekengi*.

SOLDANE′LLA. (*A solidando*, from its uses in healing fresh wounds.) The sea convolvulus. See *Convolvulus soldanella*.

SO′LEN. (Σωλην.) A tube or channel. A cradle for a broken limb.

SOLENA′RIUM. (Dim. of *σωλην*, a tube.) A catheter.

SO′LEUS. (From *solea*, a sole, from its shape being like the sole fish.) See *Gastrocnemius internus*.

SOLIDA′GO. (From *solido*, to make firm; so called from its uses in consolidating wounds.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia superflua*. The herb comfrey.

Solida'go virgau'rea. The systematic name of the golden rod. *Virga aurea. Herba dorea. Conyza coma aurea. Symphytum. Petræum. Elichrysum. Consolida saracenica.* Golden rod. The leaves and flowers of this plant are recommended as aperients and corroborants in urinary obstructions, ulcerations of the kidneys and bladder, and it is said by some to be particularly useful in stopping internal hæmorrhages.

SOLIDS. In anatomy, are the bones, ligaments, membranes, muscles, nerves, and vessels.

So'lium. (From *solus*, alone; so called because it infests the body singly.) The tape-worm.

Solomon's seal. The *convallaria polygonatum*. Useful as an outward application for bruises; dried and powdered it is said to be antidysenteric, and if beaten into a conserve with sugar whilst it is green, is recommended in leucorrhœa.

Solse'quium. (From *sol*, the sun, and *sequor*, to follow, so called because it turns its flowers towards the sun.) Marigold or turnsole.

Solvent. See *Menstruum*.

SOLUTION. An intimate commixture of solid bodies with fluids, into one seemingly homogeneous liquor. The dissolving fluid is called a menstruum or solvent.

Soluti'va. (From *solvo*, to loosen.) Laxative medicines, gentle purgatives.

Somnambulism. Sleep-walking. See *Oneirodynia*.

Somni'fera. (From *somnus*, sleep, and *fero*, to bring.) Opiates; medicines which induce sleep.

Sonchi'tes. (From σογχος, the sow-thistle; so named from its resemblance to the sonchus.) The herb hawkweed.

SO'NCHUS. (Παρα το σωον χεειν, from its wholesome juice.) The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Pol. æqualis*. The sow-thistle.

So'nchus olera'ceus. The systematic name of the sow-thistle. Most of the species of sonchus abound with a milky juice, which is very bitter, and said to possess diuretic virtues. This is sometimes employed with that intention. Boiled it may be eaten as a substitute for cabbage.

Soot. *Fuligo*. A volatile matter, arising from coals, wood, and other fuel along with the smoke. It is used as a material for making muriate of ammonia. At no very remote period our dispensatories contained directions for a tincture of soot; the most material ingredient of which, however, was assafœtida.

So'phia. (From σοφος, wise; so named from its great virtues in stopping fluxes.) Flix-weed or flux-weed.

So'phia chirurgo'rum. See *Sisymbrium sophia*.

SOPHISTICATION. A term employed in pharmacy, to signify the counterfeiting or adulterating any medicine. This practice unhappily obtains with most dealers in drugs, &c.; and the cheat is carried on so artificially by many as to prevent a discovery even by persons of the most discerning faculties.

Sophroniste'res. (From σωφρονιζω, to become wise; so called because they do not appear till after puberty.) The last of the grinding-teeth.

Sopho'ra heptaphy'lla. The systematic name of the shrub whose root and seeds are sometimes called *anticholerica*; they are both intensely bitter and said to be useful in cholera, colic, and dysury.

Sopie'ntia. (From *sopio*, to make sleep.) Opiates.

SO'POR. Profound sleep.

SOPORIFEROUS. (*Soporifera medicamenta*; from *sopor*, sleep, and *fero*, to bear.) A term given to those medicines which induce sleep. See *Anodynes*.

So'ra. (Arab.) The nettle-rash.

Sorbastre'lla. (From *sorbeo*, to suck up, because it stops hæmorrhages.) The herb burnet.

SO'RBUS. (From *sorbeo*, to suck up; because its fruit stops fluxes.) The name of a genus of plants in the Linnæan system. Class, *Icosandria*. Order, *Trigynia*. The service-tree.

So'rbus aucupa'ria. The wild service-tree. The berries of this plant are adstringent, and, it is said, have been found serviceable in allaying the pain of calculous affections in the kidneys.

SO'RDES. When the matter discharged from ulcers is rather viscid or glutinous, it is thus named. The matter is frequently of a brownish-red colour, somewhat resembling the grounds of coffee, or grumous blood mixed with water. *Sordes, Sanies*, and *Ichor*, are all of them much more fœtid than purulent matter, and none of them are altogether free from acrimony; but that which is generally termed *Ichor* is by much the most acrid of them, being frequently so sharp and corrosive as to destroy large quantities of the neighbouring parts.

Sore, bay. A disease which Dr. Mosely considers as a true cancer, commencing with an ulcer. It is endemic at the Bay of Honduras.

Sore-thoat. See *Cynanche*.

Sorrel, common. See *Rumex acetosa*.

Sorrel, French. See *Rumex scutatus*.

Sorrel, round-leaved. See *Rumex scutatus*.

Sorrel, wood. See *Oxalis acetosella*.

SOUND. An instrument which surgeons introduce through the urethra into the bladder, to discover whether there is a stone in this viscus or not.

Sour dock. See *Rumex acetosa.*

Southernwood. See *Artemisia abrotanum.*

Sow-bread. See *Cyclamen.*

SPA WATER. This mineral water appears to be a very strongly acidulous chalybeate, containing more iron and carbonic acid than any other mineral spring. What applies to the use of chalybeates will apply to this water.

Spain, pellitory of. See *Anthemis Pyrethrum.*

Spanish fly. See *Lytta.*

Spanish liquorice. See *Glycyrrhiza.*

Spargano′sis. (From *σπαργαω*, to swell.) A milk abscess.

SPA′RTIUM. The name of a genus of plants in the Linnæan system. Class, *Diadelphia.* Order, *Decandria.*

Spa′rtium scopa′rium. The systematic name of the common broom. *Genista.* The tops and leaves of this indigenous plant, *Spartium; foliis ternatis solitariisque, ramis inermibus angulatis,* of Linnæus, are the parts that are employed medicinally; they have a bitter taste, and are recommended for their purgative and diuretic qualities, in hydropic cases.

SPASM. (*Spasmus,* from *σπαω*, to draw.) A spasm or convulsion. An involuntary contraction of the muscular fibres, or that state of the contraction of muscles which is not spontaneously disposed to alternate with relaxation, is properly termed spasm. When the contractions alternate with relaxation, and are frequently and preternaturally repeated, they are called convulsions. Spasms are distinguished by authors into clonic and tonic spasms. In *clonic* spasms, which are the true convulsions, the contractions and relaxations are alternate, as in epilepsy; but in *tonic* spasms the member remains rigid, as in locked jaw. See *Convulsion, Tonic spasm,* and *Tetanus.*

SPA′SMI. Spasmodic diseases. The third order of the Class, *Neuroses,* of Cullen; characterized by a morbid contraction or motion of muscular fibres.

Spasmodic colic. See *Colica.*

Spasmology. (*Spasmologia,* from *σπασμος*, a spasm, and *λογος*, a discourse.) A treatise on convulsions.

SPA′SMUS CYNICUS. The *spasmus cynicus,* or sardonic grin, is a convulsive affection of the muscles of the face and lips on both sides, which involuntarily forces the muscles of those parts into a species of grinning distortion. If one side only be affected, the disorder is nominated tortura oris. When the masseter, buccinator, temporal, nasal, and labial muscles, are involuntarily excited to action, or contorted by contraction or relaxation, they form a species of malignant sneer. It sometimes arises from eating hemlock, or other acrid poisons, or succeeds to an apoplectic stroke.

Spathome′le. (From *σπαθη*, a sword, and *μηλη*, a probe.) An edged probe.

Spa′tula. (Dim. of *spatha,* a broad instrument.) An instrument for spreading salve. Also a name of the herb spurgewort, from its broad leaves.

Spearmint. See *Mentha viridis.*

Spearwort, water. See *Ranunculus flammula.*

SPECIFIC. A remedy that has an infallible efficacy in the cure of disorders. The existence of such remedies is doubted.

Speci′llum. (From *specio,* to examine.) A probe.

SPE′CULUM A′NI. An instrument for distending the anus whilst an operation is performed upon the parts within.

SPE′CULUM MATRI′CIS. An instrument to assist in any manual operation belonging to the womb.

SPE′CULUM O′CULI. (*Speculum,* from *specio,* to view.) An instrument used by oculists to keep the eyelids open and the eye fixed.

SPE′CULUM O′RIS. An instrument to force open the mouth.

Spe′culum ve′neris. See *Achillea millefolium.*

Speech. See *Voice.*

Speedwell, female. See *Antirrhinum elatine.*

Speedwell, male. See *Veronica.*

Speedwell, mountain. See *Veronica.*

SPERMA-CETI. (From *σπερμα*, seed, *a σπειρω*, to sow, and *cete,* or *cetus,* the whale.) See *Physeter.*

SPERMA′TICA. Belonging to the testicle and ovary, as the spermatic artery, chord and veins.

SPERMATOCE′LE. (*σπερματοκηλη*, from *σπερμα*, seed, and *κηλη*, a tumour.) *Epididymis distensa.* A swelling of the testicle or epididymis from an accumulation of semen. It is known by a swelling of those organs, pain extending to the loins without inflammation.

Spermatopoe′tica. (From *σπερμα*, and *ποιεω*, to make.) Medicines which increase the generation of seed.

SPHACELI′SMUS. (From *σφακελιζω*, to gangrene.) A gangrene. Also a phrenitis.

SPHA′CELUS. (From *σφακω*, to destroy.) A mortification of any part. See *Gangrene.*

Sphænoi′des. See *Sphenoides.*

Sphæri′tis. (From *σφαιρα*, a globe; so called from its round head.) *Sphærocephalia elatior. Sphærocephalus.* The globe-thistle.

Sphæroce′phalus. See *Sphæritis.*

Sphæro′ma. (From *σφαιρα*, a globe.) A fleshy globular protuberance.

SPHENOI′DES OS. (From *σφην*, a wedge, and *ειδος*, a likeness; because it is fixed in the cranium like a wedge.) *Os cuneiforme, os multiforme. Os azygos. Papillare os. Basilare os. Os polymorphos.* Pterygoid Bone. The os sphenoides or cuneiforme, as it is called from its wedge-like situation amidst the other bones of the head, is of a more irregular figure than any other bone. It has been compared to a bat with its wings extended. This resemblance is but faint, but it would be difficult perhaps to find any thing it resembles more.

We distinguish in this bone its body or middle part, and its wings or sides, which are much more extensive than its body.

Each of its wings or lateral processes is divided into two parts. Of these the uppermost and most considerable portion, helping to form the deepest part of the temporal fossa on each side, is called the *temporal process.* The other portion makes a part of the orbit, and is therefore named the *orbitar process.* The back part of each wing, from its running out sharp to meet the os petrosum, has been called the *spinous process;* and the two processes, which stand out almost perpendicular to the basis of the skull, have been named *pterygoid* or *aliform* processes, though they may be said rather to resemble the legs than the wings of the bat. Each of these processes has two plates and a middle fossa facing backwards; of these plates the external one is the broadest, and the internal one the longest. The lower end of the internal plate forms a kind of hook, over which passes the round tendon of the *musculus circumflexus palati.* Besides these, we observe a sharp middle ridge, which stands out from the middle of the bone. The fore part of it, where it joins the nasal lamella of the ethmoidal bone, is thin and straight; the lower part of it is thicker, and is received into the vomer.

The cavities observable on the external surface of the bone, are where it helps to form the temporal, nasal, and orbitar fossæ. It has likewise two fossæ in its pterygoid processes. Behind the edge, which separates these two fossæ, we observe a small groove, made by a branch of the superior maxillary nerve in its passage to the temporal muscle. Besides these, it has other depressions, which serve chiefly for the origin of muscles.

Its foramina are four on each side. The three first serve for the passage of the optic, superior maxillary, and inferior maxillary nerves; the fourth transmits the largest artery of the dura mater. On each side we observe a considerable fissure, which, from its situation, may be called the superior orbitar fissure. Through it pass the third and fourth pair of nerves, a branch of the fifth, and likewise the sixth pair. Lastly, at the basis of each pterygoid process, we observe a foramen which is named *pterygoidean,* and sometimes *Vidian,* from Vidius, who first described it. Through it passes a branch of the external carotid, to be distributed to the nose.

The os sphenoides on its internal surface affords three fossæ. Two of these are considerable ones; they are formed by the lateral processes, and make part of the lesser fossæ of the basis of the skull. The third, which is smaller, is on the top of the body of the bone, and is called *sella turcica,* from its resemblance to a Turkish saddle. In this the pituitary gland is placed. At each of its four angles is a process. They are called the *clinoid* processes, and are distinguished by their situation into anterior and posterior processes. The two latter are frequently united into one.

Within the substance of the os sphenoides, immediately under the sella turcica, we find two cavities, separated by a thin bony lamella. These are the sphenoidal sinuses. They are lined with the pituitary membrane, and, like the frontal sinuses, separate a mucus which passes into the nostrils. In some subjects there is only one cavity; in others, though more rarely, we find three.

In infants the os sphenoides is composed of three pieces, one of which forms the body of the bone and its pterygoid processes, and the other two its lateral processes. The clinoid processes may even then be perceived in a cartilaginous state, though some writers have asserted the contrary; but we observe no appearance of any sinus.

This bone is connected with all the bones of the cranium, and likewise with the ossa maxillaria, ossa malarum, ossa palati, and vomer. Its uses may be collected from the description we have given of it.

SPHENOIDAL SUTURE. *Sutura sphenoidalis.* The sphenoidal and ethmoidal sutures are those which surround the many irregular processes of these two bones, and join them to each other and to the rest.

SPHE'NO-MAXILLA'RIS. An artery, and a fissure of the orbit of the eye, is so called.

SPHENO-SALPI'NGO-STAPHYLI'NUS. See *Circumflexus.*

SPHENO-STAPHYLI'NUS. See *Levator palati.*

SPHI'NCTER. (From σφιγγω, to shut up.) The name of several muscles, whose office is to shut or close the aperture around which they are placed.

SPHI'NCTER ANI. *Sphincter externus,* of Albinus and Douglas. *Sphincter cutaneus,* of Winslow, and *coccigio-cutané-sphincter,* of Dumas. A single muscle of the anus, which shuts the passage through the anus into the rectum, and pulls down the bulb of the urethra, by which it assists in ejecting the urine and semen. It arises from the skin and fat that surrounds the verge of the anus on both sides, near as far as the tuberosity of the ischium; the fibres are gradually collected into an oval form, and surround the extremity of the rectum. It is inserted by a narrow point into the perineum, acceleratores urinæ, and transversi perinei; and behind into the extremity of the os coccygis, by an acute termination.

Sphi′ncter a′ni cuta′neus. See *Sphincter ani.*

Sphi′ncter a′ni exte′rnus. See *Sphincter ani.*

Sphi′ncter a′ni inte′rnus. Albinus and Douglas call the circular fibres of the muscular coat of the rectum, which surround its extremity, by this name.

Sphi′ncter cu′taneus. See *Sphincter ani.*

Sphi′ncter exte′rnus. See *Sphincter ani.*

Sphi′ncter gu′læ. The muscle which contracts the top of the throat.

Sphi′ncter labio′rum. See *Orbicularis oris.*

Sphi′ncter o′ris. See *Orbicularis oris.*

SPHI′NCTER VAGI′NÆ. *Constrictor cunni,* of Albinus. *Second muscle of the clitoris,* of Douglas, and *anulo-syndesmo-clitoridien,* of Dumas. This muscle arises from the sphincter ani and from the posterior side of the vagina near the perineum; from thence it runs up the side of the vagina, near its external orifice, opposite to the nymphæ, covers the corpus cavernosum, and is inserted into the crus and body or union of the crura clitoridis. Its use is to contract the mouth of the vagina.

Sphingo′nta. (From *σφιγγω,* to bind.) Astringent medicines.

Sphondy′lium. (From *σπόνδυλος,* vertebra; named from the shape of its root; or probably because it was used against the bite of a serpent, called *σπονδυλις.*) This is supposed to be the branckursine. See *Acanthus mollis.*

SPI′CA. 1. An ear of corn. 2. A bandage resembling an ear of corn.

Spi′ca bre′vis. Fox-tail plant.

Spi′ca ce′ltica. See *Valeriana celtica.*

Spi′ca fæ′mina. Common lavender.

Spi′ca i′ndica. See *Nardus indica.*

Spi′ca inguina′lis. A bandage for ruptures in the groin.

Spi′ca inguina′lis du′plex. Double bandage for ruptures.

Spi′ca mas. Broad-leaved lavender.

Spi′ca na′rdi. See *Nardus indica.*

Spi′ca si′mplex. A common roller or bandage.

SPIGE′LIA. (From *spica,* an ear of corn; so called from its spicated top.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The name in some pharmacopœias for the *Spigelia anthelmia.*

Spi′gelia anthe′lmia. The systematic name of the spigelia of some pharmacopœias. It is directed as an anthelmintic; its virtues are very similar to those of the Indian pink. See *Spigelia marilandica.*

Spige′lia lonicera. See *Spigelia marilandica.*

Spige′lia marila′ndica. *Spigelia lonicera.* Perennial worm-grass, or Indian pink. *Spigelia; caule tetragono, foliis omnibus oppositis,* of Linnæus. The whole of this plant, but most commonly the root, is employed as an anthelmintic by the Indians and inhabitants of America. Dr. Hope has written in favour of this plant, in continued and remitting low worm-fevers; besides its property of destroying the worms in the primæ viæ, it acts as a purgative.

Spigelian lobe. See *Liver.*

SPIGELIUS, Adrian, was born at Brussels in 1578. He studied at Louvain, and afterwards at Padua, where he took his degree. He became thoroughly skilled in every branch of his profession, particularly in anatomy and surgery; and after travelling some time to the different schools in Germany, he settled in Moravia, where he was soon appointed physician to the States of the Province. In 1616 he was invited to occupy the principal professorship in anatomy and surgery at Padua, where he acquitted himself with so much success, that he was created a Knight of St. Mark, and presented with a collar of gold. He died in 1625. His writings evince him to have possessed very extensive medical knowledge. The first, which he published, contains some interesting information concerning the virtues of plants, respecting which he appears to have learnt much from the Italian peasantry. He wrote also concerning some diseases, and other matters. But the most valuable of his works are those composed on anatomical subjects, published after his death by his son-in-law, Crema.

Spignel. See *Æthusa meum.*

Spike. See *Nardus indica.*

Spikenard. See *Nardus indica.*

Spila′nthus acme′lla. *Achmella. Achamella.* The systematic name of the balm-leaved spilanthus which possesses a glutinous bitter taste and a fragrant smell. The herb and seed are said to be diuretic and emmenagogue, and useful in dropsies, jaundice, fluor albus, and calculous complaints, given in infusion.

SPI′NA. (*Quasi spiculina,* dim. of *spica.*) 1. A thorn. 2. The back-bone; so called from the thorn-like processes of the vertebræ. 3. The shin-bone.

Spi′na a′cida. See *Berberis.*

Spi′na acu′ta. The hawthorn.

Spi′na ægypti′aca. The Egyptian thorn or sloe-tree. See *Acacia vera.*

Spi′na a′lba. The white-thorn tree.

Spi′na ara′bica. The chardon or Arabian thistle.

SPI′NA BI′FIDA. *Hydrops medullæ spinalis. Hydrocele spinalis. Hydrorachi-*

tis spinosa. A tumour upon the spine of new-born children immediately about the lower vertebræ of the loins, and upper parts of the sacrum; at first, it is of a dark blue colour; but in proportion as it increases in size, approaches nearer and nearer to the colour of the skin, becoming perfectly diaphanous.

From the surface of this tumour a pellucid watery fluid sometimes exudes, and this circumstance has been noticed by different authors. It is always attended with a weakness, or, more properly speaking, a paralysis of the lower extremeties. The opening of it rashly has proved quickly fatal to the child. Tulpius, therefore, strongly disuades us from attempting this operation. Acrel mentions a case where a nurse rashly opened a tumour, which, as she described it, was a blood bag on the back of the child at the time of its birth, in bigness equal to a hen's egg, in two hours after which the child died. From the dissection it appeared that the bladder lay in the middle of the os sacrum, and consisted of a coat, and some strong membrane, which proceeded from a long fissure of the bones. The extremity of the spinal marrow lay bare, and the spinal duct, in the os sacrum, was uncommonly wide, and distended by the pressure of the waters. Upon tracing it to the head, the brain was found nearly in its natural state, but the ventricles contained so much water that the infundibulum was quite distended with it, and the passage between the third and fourth ventricle was greatly enlarged.

He likewise takes notice of another case, where a child lived about eight years labouring under this complaint, during which time it seemed to enjoy tolerable health, though pale. Nothing seemed amiss in him, but such a degree of debility as rendered him incapable to stand on his legs.

The tumour, as in the former case, was in the middle of the os sacrum, of the bigness of a man's fist, with little discolouring; and upon pressing it became less. When opened it was found full of water, and the coats were the same as in the former, but the separation of the bones was very considerable. The spinal marrow, under the tumour, was as small as a pack-thread, and rigid; but there were no morbid appearances in the brain.

Spi'na bu'rghi monspelie'nsis. Evergreen privet.

SPI'NA CERVI'NA. (So called from its thorns resembling those of the stag.) See *Rhamnus catharticus.*

Spi'na hi'rci. The goats'-thorn of France yielding gum-tragacanth.

Spi'na infecto'ria. See *Rhamnus catharticus.*

Spi'na purga'trix. The purging thorn.

Spi'na solstitia'lis. The calcitrapa officinalis. Barnaby's thistle.

SPI'NA VENTO'SA. (The term of spina seems to have been applied by the Arabians to this disorder, because it occasions a prickling in the flesh like the puncture of thorns; and the epithet ventosa is added, because, upon touching the tumour, it seems to be filled with wind, though this is not the cause of the distension.) *Spinæ ventositas. Teredo. Fungus articuli. Arthrocace. Sideratio ossis. Cancer ossis. Gangræna ossis,* and some French authors term it *exostosis.* When children are the subjects of this disease, M. Severinus calls it *Pædarthrocace.* A tumour arising from an internal caries of a bone. It most frequently occurs in the carpus and tarsus, and is known by a continual pain in the bone, and a red swelling of the skin, which has a spongy feel.

Spina'chia. See *Spinacia.*

SPINA'CIA. (From Ισπανια, Spain, whence it originally came; or from its spinous seed.) *Spinachia.* Spinach. Spinage. This plant, *Spinacia oleracea,* of Linnæus is sometimes directed for medicinal purposes in the cure of phthisical complaints; made into a poultice, by boiling the leaves and adding some oil, it forms an excellent emollient. As an article of food it may be considered as similar to cabbage and other oleraceous plants. See *Brassica capitata.*

Spina'cia olera'cea. The systematic name of spinage. See *Spinacia.*

Spi'næ cra'tes. The spine of the back.

Spi'næ vento'sitas. A caries, or decay of a bone.

Spinal marrow. See *Medulla spinalis.*

SPINA'LIS CERVI'CIS. This muscle, which is situated close to the vertebræ at the posterior part of the neck and upper part of the back, arises, by distinct tendons, from the tranverse processes of the five or six uppermost vertebræ of the back, and, ascending obliquely under the complexus, is inserted, by small tendons, into the spinous processes of the sixth, fifth, fourth, third, and second vertebræ of the neck.

Its use is to extend the neck obliquely backwards.

Spina'lis co'lli. See *Semi-spinalis colli.*

SPINA'LIS DO'RSI. *Transversalis dorsi,* of Winslow, and *inter-epineux,* of Dumas. This is the name given by Albinus to a tendinous and fleshy mass, which is situated along the spinous processes of the back and the inner side of the longissimus dorsi.

It arises tendinous and fleshy from the spinous processes of the uppermost vertebræ of the loins, and the lowermost ones of the back, and is inserted into the spinous processes of the nine uppermost vertebræ of the back.

Its use is to extend the vertebræ, and to assist in raising the spine.

Spina'les lumbo'rum. Muscles of the loins.

SPINE. (*Spina*, from *spina*, thorn; so called from the spine-like processes of the vertebræ.) *Spina dorsi. Columna spinalis. Columna vertebralis.* A bony column or pillar extending in the posterior part of the trunk from the great occipital foramen to the sacrum. It is composed of twenty-four bones called vertebræ. See *Vertebræ.*

Spino'sa. See *Spina bifida.*

Spino'sum syri'acum. The Syrian broom.

SPIRÆ'A. (From *spira*, a pillar; so named from its spiral stalk.) Meadow sweet. The name of a genus of plants in the Linnæan system. Class, *Pentagynia.* Order, *Icosandria.*

Spiræ'a africa'na. African meadow sweet.

Spiræ'a filipe'ndula. The systematic name of the officinal dropwort. *Filipendula. Saxifraga rubra.* Drop-wort. The root of this plant, *Spiræa; foliis pennatis, foliolis uniformibus serratis; caule herbaceo; floribus corymbosis,* of Linnæus, possesses adstringent, and, it is said, lithontriptic virtues. It is seldom used in the practice of the present day.

Spiræ'a ulma'ria. The systematic name of the meadow sweet. *Ulmaria. Regina prati. Barba capræ.* Meadow-sweet. Queen of the meadows. This is a beautiful and fragrant plant. The leaves are recommended as mild adstringents. The flowers have a strong smell, resembling that of May; they are supposed to possess antispasmodic and diaphoretic virtues, and as they are very rarely used in medicine, Linnæus suspects that the neglect of them has arisen from the plant being supposed to be possessed of some noxious qualities, which it seemed to betray by its being left untouched by cattle. It may be observed, however, that the cattle also refuse the Angelica and other herbs, whose innocence is apparent from daily experience.

SPIRIT. *Spiritus.* This name was formerly given by chemists to all volatile substances collected by distillation. Three principal kinds were distinguished: inflammable or ardent spirits, acid spirits, and alkaline spirits. The word spirit is now almost exclusively confined to alcohol.

Spi'ritus æ'theris ni'trici. *Spiritus ætheris nitrosi. Spiritus nitri dulcis.* "Take of rectified spirits, two pints; nitric acid, by weight, three ounces; add the acid gradually to the spirit, and mix them, taking care that the heat do not exceed 120 degrees; then with a gentle heat distil twenty-four fluid ounces." A febrifuge, diaphoretic, and diuretic compound mostly administered in asthenia, nervous affections, dysuria, and calculous complaints.

Spi'ritus æ'theris sulphu'rici. *Spiritus vitrioli dulcis. Spiritus ætheris vitriolici.* "Take of sulphuric æther, half a pint; rectified spirit, a pint: mix them." A diaphoretic, antispasmodic, and tonic preparation, mostly exhibited in nervous debility, and weakness of the primæ viæ.

Spi'ritus æ'theris aroma'ticus. "Take of cinnamon-bark, bruised, three drachms; cardamom seeds powdered, a drachm and a half; long pepper powdered, ginger-root sliced, each a drachm; spirit of sulphuric æther, a pint; macerate for fourteen days, in a closed glass vessel, and strain." An excellent stimulating and stomachic compound, which is administered in debility of the stomach and nervous affections.

Spi'ritus æ'theris sulphu'rici compo'situs. "Take of spirit of sulphuric æther, a pint; æthereal oil, two fluid drachms; mix them." A stimulating anodyne, supposed to be similar to the celebrated *liquor mineralis anodynus,* of Hoffman. It is exhibited in fevers, nervous affections, hysteria, &c.; and in most cases of fever where medicines are rejected by the stomach, this is of infinite service.

Spi'ritus ammo'niæ. Spirit of ammonia. Formerly called *Spiritus salis ammoniaci dulcis. Spiritus salis ammoniaci.* "Take of proof spirit, three pints; muriate of ammonia, four ounces; subcarbonate of potash, six ounces; mix them, and, with a gentle fire, let a pint and a half be distilled into a cooled receiver." A stimulating antispasmodic, occasionally exhibited in cases of asphyxia, asthenia, and in nervous diseases, but mostly used as an external stimulant against rheumatism, sprains, and bruises.

Spi'ritus ammo'niæ aroma'ticus. Aromatic spirit of ammonia. Formerly known by the name of *Spiritus ammoniæ compositus: Spiritus volatilis aromaticus: Spiritus salis volatilis oleosus.* "Take of cinnamon-bark bruised, cloves bruised, each two drachms; lemon-peel, four ounces; subcarbonate of potash, half a pound; muriate of ammonia, five ounces; rectified spirit, four pints; water, a gallon; mix and distil six pints." A stimulating antispasmodic and sudorific in very general use, to smell at in faintings and lowness of spirits. It is exhibited internally in nervous affections, hysteria, and weakness of the stomach. The dose is from half a drachm to a drachm.

Spi'ritus ammo'niæ fœ'tidus. Fetid spirit of ammonia. Formerly called *spiritus volatilis fœtidus.* "Take of spirit of ammonia, two pints; assafœtida, two ounces. Macerate for twelve hours, then by a gentle fire distil a pint and a half into a cooled receiver." A stimulating antispasmodic, often exhibited to children against convulsions, and to gouty and asthmatic persons. The dose is from half to a whole fluid drachm.

Spi'ritus ammo'niæ succina'tus. Succinated spirited of ammonia. Formerly known by the names of *Eau de luce*; *Spiritus salis ammoniaci succinatus*; *Liquor cornu cervi succinatus*. "Take of mastich, three drachms; rectified spirit nine fluid drachms; oil of lavender, fourteen minims; oil of amber, four minims; solution of ammonia, ten fluid ounces. Macerate the mastich in the spirit that it may dissolve, and pour off the clear tincture, to this add the remaining articles, and shake them together." This preparation is much esteemed as a stimulant and nervine medicine, and is employed internally and externally against spasms, hysteria, syncope, vertigo, and the stings of insects. The dose is from ten minims to half a fluid-drachm.

Spi'ritus ani'si. Spirit of aniseed. Formerly called *Spiritus anisi compositus*; *Aqua seminum anisi composita*. "Take of aniseed, bruised, half a pound; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for twenty-four hours, and distil a gallon by a gentle fire." A stimulating carminative and stomachic, calculated to relieve flatulency, borborygmus, colic, and spasmodic affections of the bowels. The dose is from half to a whole fluid drachm.

Spi'ritus armora'ciæ compo'situs. Compound spirit of horse-radish, formerly called *spiritus raphani compositus*: *Aqua raphani composita*. "Take of horse-radish root, fresh and sliced, dried orange-peel, of each a pound; nutmegs, bruised, half an ounce; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for twenty-four hours, and distil a gallon by a gentle fire." A very warm stimulating compound given in gouty, rheumatic, and spasmodic affections of the stomach, and in scorbutic disorders. The dose is from half a fluid drachm to half a fluid ounce.

Spi'ritus ca'mphoræ. Spirit of camphor. Formerly known by the names of *spiritus camphoratus*: *Spiritus vinosus camphoratus*: *Spiritus vini camphoratus*. "Take of camphor, four ounces; rectified spirit, two pints. Mix, that the camphor may be dissolved." A stimulating medicine, used as an external application against chilblains, rheumatism, palsy, numbness, and gangrene.

Spi'ritus ca'rui. Spirit of caraway. Formerly called *aqua seminum carui*. "Take of caraway-seeds, bruised, a pound and a half; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." The dose is from a fluid drachm to half a fluid ounce.

Spi'ritus cinnamo'mi. Spirit of cinnamon. Formerly called *aqua cinnamomi spirituosa*. *Aqua cinnamomi fortis*. "Take of cinnamon-bark, bruised, a pound; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." Spirit of cinnamon is mostly used in conjunction with other carminatives to give a pleasant flavour; it may be exhibited alone as a carminative and stimulant. The dose is from a fluid drachm to half a fluid ounce.

Spi'ritus co'rnu ce'rvi. See *Ammoniæ subcarbonas*.

Spi'ritus juni'peri compo'situs. Compound spirit of juniper. Formerly called *aqua juniperi composita*. "Take of juniper-berries, bruised, a pound; caraway-seeds, bruised, fennel-seeds, bruised, of each an ounce and a half; proof spirit a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire."

Spi'ritus lava'ndulæ. Spirit of lavender. Formerly called *spiritus lavendulæ simplex*. "Take of fresh lavender flowers, two pounds; rectified spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." Though mostly used as a perfume, this spirit may be given internally as a stimulating nervine and antispasmodic. The dose is from a fluid drachm to half a fluid ounce.

Spi'ritus lava'ndulæ compo'situs. Compound spirit of lavender. Formerly called *spiritus lavendulæ compositus matthiæ*. "Take of spirit of lavender, three pints; spirit of rosemary, a pint; cinnamon bark, bruised, nutmegs, bruised, of each half an ounce; red saunders wood, sliced, an ounce. Macerate for fourteen days, and strain." An elegant and useful antispasmodic, and stimulant in very general use against nervous diseases, lowness of spirits, and weakness of the stomach, taken on a lump of sugar.

Spi'ritus lumbrico'rum. The spirit obtained by the distillation of the earth-worm is similar to hartshorn.

Spi'ritus me'nthæ piperi'tæ. Spirit of peppermint. Formerly called *spiritus menthæ piperitidis*: *Aqua menthæ piperitidis spirituosa*. "Take of peppermint, dried, a pound and a half; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." This possesses all the properties of the peppermint with the stimulating virtues of the spirit. The dose from one fluid drachm to a fluid ounce.

Spi'ritus me'nthæ vi'ridis. Spirit of spearmint. Formerly called *spiritus menthæ sativæ*: *Aqua menthæ vulgaris spirituosa*. "Take of spearmint, dried, a pound and a half; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon." This is most commonly added to carminative or antispasmodic draughts, and seldom exhibited alone. The dose from one fluid drachm to a fluid ounce.

Spi′ritus millepeda′rum. A fluid volatile alkali, whose virtues are similar to hartshorn.

Spi′ritus mindere′ri. See *Ammoniæ acetatis liquor.*

Spi′ritus myri′sticæ. Spirit of nutmeg. Formerly called *aqua nucis moschatæ.* "Take of nutmegs, bruised, two ounces; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." A stimulating and agreeable spirit possessing the virtues of the nutmeg. The dose from one fluid drachm to a fluid ounce.

Spi′ritus ni′tri du′lcis. See *Spiritus ætheris nitrici.*

Spi′ritus ni′tri du′plex. The nitrous acid. See *Acidum nitrosum,* and *Nitric acid.*

Spi′ritus ni′tri fu′mans. See *Acidum nitrosum,* and *Nitric acid.*

Spi′ritus ni′tri glaube′ri. See *Acidum nitrosum,* and *Nitric acid.*

Spi′ritus ni′tri si′mplex. The dilute nitrous acid. See *Acidum nitricum dilutum.*

Spi′ritus ni′tri vulga′ris. This is now called acidum nitricum dilutum.

Spi′ritus pime′ntæ. Spirit of pimento. Formerly called *spiritus pimento.* "Take of allspice, bruised, two ounces; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." A stimulating aromatic tincture mostly employed with adstringent and carminative medicines. The dose is from half a fluid drachm to half a fluid ounce.

Spi′ritus pule′gii. Spirit of penny-royal. Formerly called *aqua pulegii spirituosa.* "Take of penny-royal, dried, a pound and half; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." This is in very general use as an emmenagogue amongst the lower orders. It possesses nervine and carminative virtues. The dose is from half a fluid drachm to half a fluid ounce.

Spi′ritus re′ctor. Boerhaave and other chemists give this name to a very attenuated principle, in which the smell of odorant bodies peculiarly reside. It is now called *aroma.*

Spi′ritus rosmari′ni. Spirit of rosemary. "Take of rosemary tops, fresh, two pounds; proof spirit, a gallon; water sufficient to prevent empyreuma. Macerate for 24 hours, and distil a gallon by a gentle fire." A very fragrant spirit, mostly employed for external purposes in conjunction with other resolvents.

Spi′ritus sa′lis ammoni′aci aquo′sus. See *Ammoniæ subcarbonas.*

Spi′ritus sa′lis ammoni′aci du′lcis. See *Spiritus ammoniæ.*

Spi′ritus sa′lis ammoni′aci si′mplex. See *Ammoniæ subcarbonas.*

Spi′ritus sa′lis glaube′ri. See *Muriatic acid.*

Spi′ritus sa′lis mari′ni. See *Muriatic acid.*

Spi′ritus vi′ni rectifica′tus. See *Alcohol.* Rectified spirit of wine is in general use to dissolve resinous and other medicines. It is seldom exhibited internally, though it exists in the diluted state in all vinous and spirituous liquors.

Spi′ritus vi′ni tenui′or. Proof spirit, which is about half the strength of rectified, is much employed for preparing tinctures of resinous juices, barks, roots, &c.

Spi′ritus vitri′oli. See *Sulphuric acid.*

Spi′ritus vitri′oli du′lcis. See *Spiritus ætheris sulphurici.*

Spi′ritus vola′tilis fœ′tidus. See *Spiritus ammoniæ fœtidus.*

Spissame′ntum. (From *spisso,* to thicken.) A substance put into oils and ointments to make them thick.

Spitting of blood. See *Hæmatemesis* and *Hæmoptysis.*

Spla′nchnica. (From σπλαγχνον, an intestine.) Remedies for diseased bowels.

SPLANCHNOLO′GIA. (From σπλαγχνον, an entrail, and λογος, a discourse.) Splanchnology, or the doctrine of the viscera.

SPLANCHNIC NERVE. The great intercostal nerve. See *Intercostal nerve.*

SPLEEN. Σπλην. *Lien.* The spleen or milt is a spongy viscus of a livid colour, and so variable in form, situation, and magnitude, that it is hard to determine either. Nevertheless, in a healthy man it is always placed on the left side, in the left hypochondrium, between the eleventh and twelfth false ribs. Its circumference is oblong and round, resembling an oval figure. It is larger, to speak generally, when the stomach is empty, and smaller when it is compressed, or evacuated by a full stomach.

It should particularly be remembered of this viscus, that it is convex towards the ribs, and concave internally: also, that it has an excavation, into which vessels are inserted.

It is connected with the following parts: 1. With the stomach, by a ligament and short vessels. 2. With the omentum, and the left kidney. 3. With the diaphragm, by a portion of the peritonæum. 4. With the beginning of the pancreas, by vessels 5. With the colon, by a ligament.

In man the spleen is covered with one simple, firm membrane, arising from the peritonæum, which adheres to the spleen, very firmly, by the intervention of cellular structure.

The vessels of the spleen are, the splenic artery coming from the cœliac artery, which, considering the size of the spleen, is much larger than is requisite for the mere nutrition of it. This goes by serpentine movements, out of its course, over the pancreas, and behind the stomach, and after having given off branches to the adjacent parts, it is inserted into the concave surface of the spleen. It is afterwards divided into smaller branches, which are again divided into other yet smaller, delivering their blood immediately to the veins, but emitting it no where else. The veins, at length, come together into one, called the splenic vein, and having received the large coronary vein of the stomach, besides others, it constitutes the left principal branch of the vena portæ.

The nerves of the spleen are small; they surround the arteries with their branches; they come from a particular plexus, which is formed of the posterior branches of the eighth pair, and the great intercostal nerve.

Lymphatic vessels are almost only seen creeping along the surface of the human spleen.

The use of the spleen has not hitherto been determined; yet if its situation and fabric be regarded, one would imagine its use to consist chiefly in affording some assistance to the stomach during the progress of digestion.

Spleenwort. See *Ceterach.*

Splena'lgia. (From σπλην, the spleen, and αλγος, pain.) A pain in the spleen or its region.

Splene'tica. (From σπλην, the spleen.) Medicines which relieve diseases of the spleen.

SPLENI'TIS. (From σπλην, the spleen.) Inflammation of the spleen. A genus of disease in the Class, *Pyrexiæ,* and Order, *Phlegmasiæ,* of Cullen; characterized by pyrexia, tension, heat, tumour, and pain in the left hypochondrium, increased by pressure. This disease, according to Juncker, comes on with a remarkable shivering, succeeded by a most intense heat, and very great thirst; a pain and tumour are perceived in the left hypochondrium, and the paroxysms for the most part assume a quartan form when the patients expose themselves for a little to the free air, their extremities immediately grow very cold. If an hæmorrhagy happen, the blood flows out of the left nostril. The other symptoms are the same with those of the hepatitis. Like the liver, the spleen is also subject to a chronic inflammation, which often happens after agues, and is called the ague cake, though that name is also frequently given to a scirrhous tumour of the liver succeeding intermittents. The causes of this disease are in general the same with those of other inflammatory disorders; but those which determine the inflammation to that particular part more than another, are very much unknown. It attacks persons of a very plethoric and sanguine habit of body rather than others.

During the acute stage of splenitis, we must follow the antiphlogistic plan, by general and topical bleedings, by purging frequently, and by the application of blisters near the part affected. If it should terminate in suppuration, we must endeavour to discharge the pus externally, by fomentations or poultices. When the organ is in an enlarged scirrhous state, mercury may be successful in preventing its farther progress, or even producing a diminution of the part; but proper caution is required in the use of it, lest the remedy do more harm than the disease.

Sple'nium. (From σπλην, the spleen; so called from its efficacy in disorders of the spleen.) 1. Spleen wort. 2. A compress shaped like the spleen.

SPLE'NIUS. (From σπλην, the spleen; so named from its resemblance in shape to the spleen, or, according to some, it derives its name from *splenium,* a *ferula,* or splint, which surgeons apply to the sides of a fractured bone.) *Splenius capitus,* and *splenius colli,* of Albinus, and *cervico-dorsi-mastoidien et dorso-trachelien,* of Dumas. The splenius is a flat, broad, and oblong muscle, in part covered by the upper part of the trapezius, and obliquely situated between the back of the ear, and the lower and posterior part of the neck.

It arises tendinous from the four or five superior spinous processes of the dorsal vertebræ; tendinous and fleshy from the last of the neck, and tendinous from the ligamentum colli, or rather the tendons of the two splenii unite here inseparably; but about the second or third vertebræ of the neck they recede from each other, so that part of the complexus may be seen.

It is inserted, by two distinct tendons, into the transverse processes of the two first vertebræ of the neck, sending off some few fibres to the complexus and levator scapulæ; tendinous and fleshy into the upper and posterior part of the mastoid process, and into a ridge on the occipital bone, where it joins with the root of that process.

This muscle may easily be separated into two parts. Eustachius and Fallopius were aware of this; Winslow has distinguished them into the *superior* and *inferior* portions; and Albinus has described them as two distinct muscles, calling that part which is inserted into the mastoid process and os occipitis, *splenius capitis,* and that which is inserted into the vertebræ of the neck, *splenius colli.* We have here followed Douglas, and the generality of writers, in describing these two portions as one muscle, especially as they are intimately united near their origin.

When this muscle acts singly, it draws the head and upper vertebræ of the neck obliquely backwards; when both act, they pull the head directly backwards.

Sple'nius ca'pitis. See *Splenius.*

Sple'nius co'lli. See *Splenius.*

SPLENOCE'LE. (From σπλην, the spleen, and κηλη, a tumour.) A hernia of the spleen.

SPLINT. A long piece of wood, tin, or strong pasteboard employed for preventing the ends of broken bones from moving, so as to interrupt the process by which fractures unite.

Spo'dium. Σϖοδιον. The *spodium* of Dioscorides and of Galen are now not known in the shops. It is said to have been produced by burning cadmia alone in the furnace; for having thrown it in small pieces into the fire, near the nozzle of the bellows, they blow the most fine and subtle parts against the roof of the furnace; and what was reflected from thence was called *spodium.* It differed from the pompholyx in not being so pure, and in being more heavy. Pliny distinguishes several kinds of it, as that of copper, silver, gold, and lead.

Spo'dium a'rabum. Burnt ivory, or ivory black. See *Abaisir.*

Spo'dium græco'rum. The white dung of dogs.

Spolia'rium. A private room at the baths.

Spondy'lium. (From σπονδυλος, a vertebra; so named from the shape of its root, or probably because it was used against the bite of a serpent called σπονδυλις.) The herb all-heal. Cow-parsnip.

Spo'ndylus. Σϖονδυλος. Some have thought fit to call the spine or backbone thus, from the shape and fitness of the vertebræ, to move every way upon one another.

Sponge. See *Spongia.*

Sponge-tent. See *Spongia præparata.*

SPO'NGIA. Σπογγος σπογγια. Sponge. A sea-production, the *Spongia officinalis,* of Linnæus; the habitations of insects. Burnt sponge is said to cure effectually the bronchocele, and to be of infinite utility in scrophulous complaints. Sponge tents are employed by surgeons to dilate fistulous ulcers, &c.

Spo'ngia officina'lis. The systematic name of the sponge. See *Spongia.*

Spo'ngia præpara'ta. Prepared sponge. Sponge tent. This is formed by dipping pieces of sponge in hot melted emplastrum ceræ compositum, and pressing them between two iron plates. As soon as cold, the substance thus formed may be cut into pieces of any shape. It was formerly used for dilating small openings, for which it was well adapted, as when the wax melted, the elasticity of the sponge made it expand and distend the opening, in which it had been put. Mr. Cooper informs us that the best modern surgeons seldom employ it.

Spo'ngia u'sta. Burnt sponge. "Cut the sponge into pieces, and beat it, that any extraneous matters may be separated; then burn it in a close iron vessel until it becomes black and friable; lastly, rub it to a very fine powder." This preparation is exhibited with bark in the cure of scrophulous complaints, and forms the basis of a lozenge, which has been known to cure the bronchocele in many instances. The dose is from a scruple to a drachm.

SPONGIO'SA O'SSA. *Ossa turbinata inferiora.* These bones are situated in the under part of the side of the nose, they are of a triangular form and spongy appearance, resembling the os spongiosum superius; externally they are convex; internally they are concave; the convexity is placed towards the septum nasi, and the concavity outwards. The under edge of each bone is placed horizontally near the outer part of the nose, and ending in a sharp point behind. At the upper part of the bone are two processes, the anterior of which ascends and forms part of the lachrymal groove, and the posterior descends and forms a hook to make part of the maxillary sinus.

The connection of this bone is to the os maxillare, os palati, and os unguis, by a distinct suture in the young subject; but in the adult, by a concretion of substance.

The ossa spongiosa afford a large surface for extending the organ of smell by allowing the membrane of the nose to be expanded, upon which the olfactory nerves are dispersed.

In the fœtus, these bones are almost complete.

Spongio'sum os. 1. The ethmoid bone. 2. See *Spongiosa ossa.*

Spongoi'des. (Σϖογγοειδης, from σϖογγος, a sponge, and ειδος, *forma,* a shape.) It is the same as the *Os cribriforme,* because it is hollow and porous, like a sponge or sieve.

SPORADIC. (*Sporadicus,* from σπειρω, to sow.) An epithet for such infectious and other diseases as seize a few persons at any time or season.

Spotted lungwort. See *Pulmonaria.*

SPRUCE. 1. A particular species of fir. 2. A fermented liquor called spruce-beer prepared from the spruce fir. From the quantity of carbonic acid it contains, it is found a useful antiscorbutic.

Spurge flax. See *Daphne gnidium.*

Spurge laurel. See *Daphne laureola.*

Spurge olive. See *Daphne mezereum.*

Sprain. See *Subluxatio.*

Sputa'men. See *Sputum.*

SPU'TUM. (From *spuo,* to spit.)

Sputamen. Saliva. Any kind of expectoration.

Squama′ria. (From *squama*, a scale; so called from its scaly roots.) The great tooth wort.

SQUAMOSE SUTURE. (*Sutura squamosa*; from *squama*, a scale; because the bones lie over each other like scales.) The suture which unites the squamose portion of the temporal bone with the parietal.

Squill. See *Scilla.*

Squi′lla. See *Scilla.*

Squina′nthus. (From *squinanthia*, the quinsy; so named from its uses in the quinsy.) *Squinanthum.* The sweet rush was once so called. See *Andropogon schœnanthus.*

Sta′chys. (Σταχυς, a spike; so named from its spicated stalk and seed.) The wild sage. The base horehound or marrubium hispanicum.

Sta′chys fœ′tida. Yellow archangel. Hedge-nettle.

Sta′chys palu′stris. Clown's woundwort or all-heal.

Sta′cte. (Στακτη, from ϛάζω, to distil.) This term signifies that kind of myrrh which distils or falls in drops from the trees. It is also used by some writers for a more liquid kind of amber than what is commonly met with in the shops; whence in Scribonius Largus, Paulus Ægineta, and some others, we meet with a collyrium, and several other forms, wherein this was the chief ingredient, distinguished by the name of *Stactica.*

Sta′cticon. Instillation. An eye-water.

Sta′gma. (From ϛαζω, to distil.) Any distilled liquor. The vitriolic acid.

STAHL, George Ernest, was born at Anspach, in 1660. He graduated at Jena, at the age of twenty-four, and immediately commenced a course of private lectures there; and about three years after he was made physician to the duke of Saxe-Weimar. On the establishment of the university of Halle, in 1694, he was appointed to a medical professorship, at the solicitation of Hoffman: and he became the leader of a sect of physicians, in opposition to the mechanical theorists, in which he was followed by many eminent persons, as well in Germany as in other countries, notwithstanding the very fanciful nature of the hypothesis, on which his system was founded. It had been always observed, that there is a certain power in the animal body of resisting injuries, and correcting some of its disorders; and Van Helmont had ascribed some degree of intelligence to this power: but it was reserved for Stahl to refer it entirely to the rational soul, which, he affirmed, not only originally formed the body, but is the sole cause of all its motions, in the constant excitement of which life consists. Whence diseases were generally regarded as salutary efforts of the presiding soul, to avert the destruction of the body. This hypothesis, besides its visionary character, was justly deprecated, as leading to an inert practice, and the neglect of the collateral branches of medical science, even of anatomical researches, which Stahl maintained had little or no reference to the art of healing. And in fact both he and his followers, trusting principally to the operations of nature, zealously opposed the use of some of the most efficacious remedies, as opium, cinchona, and mercury; and were extremely reserved in the employment of bleeding, vomiting, &c., although their system led them to refer most diseases to plethora. This hypothesis was maintained by Stahl with much ingenuity in several publications, particularly in his "Theoria Medica vera," printed in 1708. The merits of Stahl, as a chemical philosopher, are of a much higher character; and the school, which he founded in this science, has only been superseded of late by farther discoveries. He was the inventor of the celebrated theory of phlogiston, which appeared to account for the phenomena of combustion, and was received every where with high applause. His chief chemical work was entitled "Fundamenta Chemiæ dogmaticæ et Experimentalis," first printed in 1729: but this had been preceded more than thirty years, by others, in which his doctrine was fully displayed. Stahl was elected a member of the Academy Naturæ Curiosorum: and he was called, in 1716, to visit the king of Prussia at Berlin, whither he went also on several subsequent occasions, and on one of these he was attacked with a disease, which proved fatal in the 74th year of his age.

Stala′gmus. (From ϛαλαζω, to distil.) Distillation.

STALAGMI′TIS. (From ϛαλαγμος, a dropping, or distillation, because the gum which it yields escapes in that manner.) The name of a genus of plants. Class, *Polygamia.* Order, *Monoecia.*

Stalagmi′tis cambogioi′des. This is now ascertained to be the tree which affords gamboge. This drug, from its supposed virtues, is also called *gummi ad podagram*; *gummi gutta*; and, by corruption, *gotta*, *gutta gamba*, *gamon*, *germandra catagemu*, *gamboidea*, &c.; and, from its gold colour, *chrysopus*; and, from its purgative quality, *succus laxativus*, *succus Indicus purgans*; and *scammonium orientale.* Gamboge is a concrete vegetable juice, which was supposed to be the produce of two trees, both called by the Indians, *Caracapulli*, and by Linnæus, *Gambogia gutta*; but Kœnig ascertained its true source. It is partly of a gummy and partly of a resinous nature. It is brought to us chiefly from Gambaja, in the East Indies, either in form of orbicular masses, or of cylindrical rolls of various sizes; and is of a dense, compact, and firm texture, and of a beautiful yellow colour.

In medicine it is chiefly used as a drastic purge; it operates powerfully both upwards and downwards. Some condemn it as acting with too great violence, while others are of a contrary opinion. The dose is from two to four grains, as a cathartic; from four to eight grains it proves emetic and purgative. The roughness of its operation is said to be diminished, by giving it in a liquid form, sufficiently diluted. Rubbed with almonds, from its want of taste, it is a convenient laxative for children.

It has been given in dropsy, with cream of tartar, to correct its operation. It has also been recommended by some, to the extent of fifteen grains, joined with an equal quantity of vegetable alkali, to destroy the tape-worm. This dose is ordered in the morning, and if the worm is not expelled in two or three hours, it is repeated even to the third time, with safety and efficacy. It is asserted, that it has been given to this extent even in delicate habits. This is said to be the remedy alluded to by Van Swieten, which was employed by Dr. Herenchwand, and with him proved so successful in the removal of the tænia lata. It is an ingredient, and probably the active one, in most of the nostrums for expelling tæniæ.

Dr. Cullen says, that, on account of the quick passage of gamboge through the intines, he was induced to give it in small, and frequently repeated doses, as three or four grains, rubbed with a little sugar, every three hours; and thus found it operate without griping or sickness, and, in three or four exhibitions, evacuate a great quantity of water both by stool and urine.

Sta'ltica. (From ϛελλω, to contract.) Healing applications.

Sta'nni pu'lvis. Tin finely divided is exhibited internally as a vermifuge: but the filings are more effectual than the powder.

STA'NNUM. See *Tin.*

Stape'dis mu'sculus. See *Stapedius.*

STAPE'DIUS. (*Stapedius,* sc. *musculus;* from *stapes,* one of the bones of the ear.) *Musculus stapes,* of Cowper, and *pyramidal-stapedien,* of Dumas. A muscle of the internal ear, which draws the stapes obliquely upwards towards the cavern, by which the posterior part of its base is moved inwards, and the anterior part outwards.

STA'PES. (*In quo pes stat,* a stirrup.) A bone of the internal ear, so called from its resemblance to a stirrup.

Staphili'nus. See *Azygos uvulæ.*

Staphili'nus exte'rnus. See *Circumflexus.*

Sta'phis. Σταφις, is strictly a grape, or a bunch of grapes; whence, from their likeness thereunto, it is applied to many other things, especially the glandulous parts of the body, whether natural or distempered.

Staphisa'gria. (Σταφις αγρια, wild vine; from the resemblance of its leaves to those of the vine.) See *Delphinium.*

Sta'phyle. (Σταφυλη. A grape or raisin; so called from its resemblance.) The uvula.

Staphyli'nus. (*Staphylinus,* sc. *musculus,* from ςταφυλη, the uvula.) See *Azygos uvulæ.*

Staphyli'nus exte'rnus. See *Circumflexus.*

Staphyli'nus græco'rum. *Staphylinus sylvestris.* The wild carrot.

STAPHYLO'MA. (From ϛαφυλη, a grape; so named from its being thought to resemble a grape.) *Staphylosis.* A disease of the eye-ball in which the cornea loses its natural transparency, rises above the level of the eye, and successively even projects beyond the eye-lids, in the form of an elongated, whitish, or pearl-coloured tumour, which is sometimes smooth, sometimes uneven, and is attended with a total loss of sight. The proximate cause is an effusion of thick humour between the lamellæ of the cornea, so that the internal and external superfices of the cornea, very much protuberates. The remote causes are, an habitual ophthalmia, great contusion, and frequently a deposition of the variolous humour in the small-pox. The species are:

1st. *Staphyloma totale,* which occupies the whole transparent cornea; this is the most frequent species. The symptoms are, the opaque cornea protuberates, and if in the form of a cone, increasing in magnitude, it pushes out and inverts the lower eye-lid; and sometimes the morbid cornea is so elongated, as to lay on the cheek, causing friction and excoriation. The bulb of the eye being exposed to the air, sordes generate, the inferior palpebra is irritated by the cilia, and very painful red and small papillæ are observable.

2d. *Staphyloma racemosum,* is a staphyloma formed by carnous tubercles, about the size of a small pin's head.

3d. *Staphyloma partiale,* which occupies some part of the cornea: it exhibits an opaque tumour prominent from the cornea, similar to a small blueish grape.

4th. *Staphyloma scleroticæ* is a blueish tumour attached to some part of the sclerotica, but arising from the tunica albuginea.

5th. *Staphyloma pellucidum,* in which the cornea is not thickened or incrassated, but very much extended and pellucid.

6th. *Staphyloma complicatum,* which is complicated with an ulcer, ectropium, caruncles, or any other disorder of the eye.

7th. *Staphyloma iridis.* For this species see *Ptosis iridis.*

Starthistle. The roots of this plant, *Carlina acaulis,* of Linnæus, are said to be diuretic, and by some recommended in gravel and jaundice.

STARCH. *Amylum.* The fecula of wheaten flour. See *Amylum.*

Starch is one of the constituent parts in all mealy farinaceous seeds, fruits, roots, and other parts of plants. Our common starch is made from wheat. It is not necessary that the grain be first bruised in mills. The entire corn, well cleansed, is soaked in cold water until the husks separate; and the grains, having become quite soft, give out, by pressure, a milky fluid. The grains are then taken out of the water by means of a sieve, put into a coarse linen sack, and transferred into the treading-tub; where they are trodden, after cold water has been poured upon them.

By this operation the starchy part is washed out, and mingling with the water makes it milky. The water is now drawn off, running through a sieve into the settling-tub. Fresh water is again effused upon the grains, and the same operation is continued till the water in the treading-tub is no longer rendered milky. The starch here precipitates by repose from the water that held it suspended; during which, especially in a warm season, the mucilaginous saccharine matter of the flour, that was dissolved by the water, goes into the acetous fermentation. From this cause the starch grows still purer and whiter. The water is next let off from the starch, which is several times more washed with clear fresh water; the remaining part of which is suffered to drip through linen cloths supported by hurdles, upon which the wet starch is placed. When the starch has fully subsided, it is wrapt in, wrung between these cloths, or pressed, to extort still more of the remaining liquid.

It is afterwards cut into pieces, which are laid in airy places on slightly burnt bricks to be completely dried, partly by the free currency of air, and partly by the bricks imbibing their moisture. Lastly, the outer crust is scraped off, and they are broken into smaller pieces.

In the sacks wherein the corn was trodden there remain its husks and glutinous parts; and this residuum is employed as food for cattle.

STA'TICE. (From ϛατιζω, to stop, so named from its supposed property of restraining hæmorrhages.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Pentagynia.* The herb sea-thrift.

Sta'tice limo'nium. The systematic name of the sea-thrift. *Behen rubrum. Limonium. Limonium majus. Behen.* Sea-lavender, or red behen. The roots possess astringent and strengthening qualities, but not in a very remarkable degree.

Stationa'ria fe'bris. A stationary fever. So Sydenham called those fevers which happen when there are certain general constitutions of the years, which owe their origin neither to heat, cold, dryness, nor moisture, but rather depend on a certain secret and inexplicable alteration in the bowels of the earth, whence the air becomes impregnated with such kinds of effluvia as subject the body to particular distempers, so long as that kind of constitution prevails, which, after a certain course of years, declines and gives way to another.

Stavesacre. See *Delphinium staphisagria.*

STEATOCE'LE. (From ϛεαρ, suet, and κηλη, a tumour.) A collection of a suety substance in the scrotum.

STEATO'MA. (From ϛεαρ, suet.) An encysted tumour, whose contents are of a suety consistence.

STEEL. *Chalybs.* The best, hardest, finest, and closest grained iron, combined with carbon by a particular process.

Stelochi'tes. See *Osteocolla.*

Ste'lla. (From ϛελλω, to arise.) A star. A bandage with many crossings like a star.

Stella'ria. (From *stella*, a star; so named from the star-like disposition of its leaves.) Stitch-wort. Ladies mantle.

Ste'ma. (From ϛημι, to stand.) The penis.

Stemless milkvetch. See *Astragalus excapus.*

STENO, Nicholas, was born at Copenhagen in 1638. Having studied with great diligence, under the celebrated Bartholin, he passed several years in visiting the best schools in different parts of Europe. His reputation was thus increased, so that about the age of 29 he was appointed Physician to Ferdinand II. Grand Duke of Tuscany, with a liberal salary. He was afterwards honoured with the esteem of Cosmo III. who selected him as preceptor to his son. He had been led, by the eloquence of Bossuet, to change from the Protestant to the Roman Catholic persuasion; which proved an obstacle to his accepting the invitation of Frederick III. to return to Copenhagen; but the succeeding King of Denmark, not imposing any religious restraint, he was induced about the year 1672, to go to his native city, where he was appointed professor of anatomy. But finding his situation less agreeable, than he had expected, he resumed the education of the young prince at Florence. Some time after this he embraced the ecclesiastical profession, was speedily appointed a bishop, and then vicar apostolical to all the states of the north, in which capacity he became a zealous preacher in various parts of Germany, and died in the course of his labours in 1686. The works extant by him relate principally to medical subjects. He was a diligent cultivator of anatomy, and made some discoveries relative to the minute structure of the eye, and other parts; which are detailed in papers communicated to the academy of Copenhagen, and in some small works published by himself.

STENOTHORA'CES. (From ϛενος, narrow, and θωραξ, the chest.) Those who have narrow chests are so called.

STERILITY. Barrenness, in opposition to fertility. In women this sometimes happens from a miscarriage, or violent labour injuring some of the genital parts; but one of the most frequent causes is the suppression of the menstrual flux. There are other causes, however, arising from various diseases incident to those parts; by which the uterus may be unfit to receive or retain the male seed;—from the tubæ Fallopianæ being too short, or having lost their erective power; in either of which cases no conception can take place;—from universal debility and relaxation; or a local debility of the genital system; by which means, the parts having lost their tone, or contractile power, the semen is thrown off immediately *post coitum*;—from imperforation of the vagina, of the uterus, or tubæ, or from diseased ova, &c.

STERNO. Names compounded of this word belong to muscles which are attached to the sternum; as,

STERNO-CLEIDO HYOIDE'US. See *Sterno-hyoideus*.

STERNO-CLEIDO MASTOIDE'US. *Sterno-mastoideus* and *cleido-mastoideus*, of Albinus. *Mastoideus*, of Douglas and Cowper, and *sterno-clavio-mastoidien*, of Dumas. A muscle, on the anterior and lateral part of the neck, which turns the head to one side and bends it forward. It arises by two distinct origins; the anterior tendinous and fleshy, from the top of the sternum near its junction with the clavicle; the posterior fleshy, from the upper and anterior part of the clavicle; both unite a little above the anterior articulation of the clavicle, to form one muscle, which runs obliquely upwards and outwards to be inserted, by a thick strong tendon, into the mastoid process of the temporal bone, which it surrounds; and gradually becoming thinner, is inserted as far back as the lambdoidal suture.

STERNO COSTA'LES. Vesalius considered these as forming a single muscle on each side of a triangular shape; hence we find the name of *triangularis* adopted by Douglas and Albinus; but Verheyen, who first taught that they ought to be described as four or five distinct muscles, gave them the name of *sterno costales*; and in this he is very properly followed by Winslow, Haller, and Lieutaud.

These muscles are situated at each side of the under surface of the sternum, upon the cartilages of the third, fourth, fifth, and sixth ribs. Their number varies in different subjects; very often there are only three, sometimes five, and even six, but most usually we find only four.

The lowermost of the sterno costales, or what would be called the inferior portion of the triangularis, arises tendinous and fleshy from the edge and inner surface of the lower part of the cartilago ensiformis, where its fibres intermix with those of the diaphragm and transversalis abdominis. Its fibres run nearly in a transverse direction, and are inserted, by a broad thin tendon, into the inner surface of the cartilage of the sixth rib, and lower edge of that of the fifth.

The second and largest of the sterno costales, arises tendinous from the cartilago ensiformis and lower part of the sternum, laterally, and, running a little obliquely outwards, is inserted into the lower edge of the cartilage of the fifth, and sometimes of the fourth rib.

The third arises tendinous from the sides of the middle part of the sternum, near the cartilages of the fourth and fifth ribs, and ascending obliquely outwards, is inserted into the cartilage of the third rib.

The fourth and uppermost, which is the most frequently wanting, arises tendinous from the beginning of the cartilage of the third rib and the adjacent part of the sternum, and running almost perpendicularly upwards, is inserted by a thin tendon (which covers a part of the second internal intercostal), into the cartilage and beginning of the bony part of the second rib.

All these muscles are more or less intermixed with one another at their origin, and this probably occasioned them to be considered as one muscle. Fallopius informs us, that the plate Vesalius has given of them was taken from a dog, in which animal they are much larger than in man. Douglas has endeavoured to account for this difference, but his explanation is far from being satisfactory.

STERNO HYOIDE'US. As this muscle arises from the clavicle, as well as from the sternum. Winslow calls it *sternocleido hyoideus*. It is a long, flat, and thin muscle, situated obliquely between the sternum and os hyoides, behind the lower part of the mastoideus, and covering the *sterno-thyroideus* and the *hyo-thyroideus*. It arises, by very short tendinous fibres, from the cartilaginous part of the first rib, from the upper and inner part of the sternum, from the capsular ligament that connects that bone with the clavicle, and commonly from a small part of the clavicle itself; from thence, ascending along the anterior and lateral part of the neck, we see it united to its fellow, opposite to the inferior part of the larynx, by means of a thin membrane, which forms a kind of *linea alba*. After this the two muscles separate again, and each passing over the side of the thyroid cartilage, is inserted into the basis of the os hyoides, immediately behind the insertion of the last-described muscle.

Its use is to draw the os hyoides downwards.

STERNO-MASTOIDE'US. See *Sterno-cleido-mastoideus.*

STERNO THYROIDE'US. *Sterno-thyroidien,* of Dumas. This is flat and thin, like the sterno-hyoideus, but longer and broader. It is situated at the fore part of the neck, between the sternum and thyroid cartilage, and behind the sterno-hyoideus. It arises broad and fleshy from the upper and inner part of the sternum, between the cartilages of the first and second ribs, from each of which it receives some few fibres, as well as from the clavicle, where it joins with the sternum. From thence, growing somewhat narrower, it ascends, and, passing over the thyroid gland and the cricoid cartilage, is inserted tendinous into the lower and posterior edge of the rough line of the thyroid cartilage, immediately under the insertion of the sterno-hyoideus. Now and then a few of its fibres pass on to the os hyoides. Its use is to draw the thyroid cartilage, and consequently the larynx, downwards.

STE'RNUM. *Pectoris os.* The breast-bone. The sternum, os pectoris, or breast-bone, is the oblong, flat bone, placed at the fore part of the thorax. The ossification of this bone in the fœtus beginning from many different points at the same time, we find it, in young subjects, composed of several bones united by cartilages; but as we advance in life, most of these cartilages ossify, and the sternum, in the adult state, is found to consist of three, and sometimes only of two pieces, the two lower portions being united into one; and very often, in old subjects, the whole is formed into one bone. But, even in the latter case, we may still observe the marks of its former divisions; so that, in describing the bone, we may very properly divide it into its upper, middle, and inferior portions.

The upper portion forms an irregular square, which, without much reason, has, by many writers, been compared to the figure of a heart as it is painted on cards. It is of considerable thickness, especially at its upper part. Its anterior surface is irregular, and slightly convex; posteriorly, it is somewhat concave. Its upper middle part is hollowed, to make way for the trachea. On each side, superiorly, we observe an oblong articulating surface, covered with cartilage in the recent subject, for receiving the ends of the clavicles. Immediately below this, on each side, the bone becomes thinner, and we observe a rough surface for receiving the cartilage of the first rib, and, almost close to the inferior edge of this, we find the half of such another surface, which, combined with a similar surface in the middle portion of the sternum, serves for the articulation of the cartilage of the second rib.

The middle portion is much longer, narrower, and thinner than the former; but is somewhat broader and thinner below than above, where it is connected with the upper portion. The whole of its anterior surface is slightly convex, and within it is slightly concave. Its edge, on each side, affords four articulating surfaces, for the third, fourth, fifth, and sixth ribs; and parts of articulating surfaces at its upper and lower parts, for the second and seventh ribs. About the middle of this portion of the sternum we sometimes find a considerable hole, large enough in some subjects to admit the end of the little finger. Sylvius seems to have been the first who described it. Riolanus and some others after him have, without reason, supposed it to be more frequent in women than in men. In the recent subject it is closed by a cartilaginous substance; and, as it does not seem destined for the transmission of vessels, as some writers have asserted, we may, perhaps, very properly, with M. Hunauld, consider it as an accidental circumstance, occasioned by an interruption of the ossification, before the whole of this part of the bone is completely ossified.

The third and inferior portion of the sternum is separated from the former by a line, which is seldom altogether obliterated, even in the oldest subjects. It is smaller than the other parts of the bone, and descends between the ribs, so as to have been considered as an appendix to the rest of the sternum. From its shape, and its being constantly in a state of cartilage in young subjects, it has been commonly named *cartilago xiphoides, ensiformis,* or sword-like cartilage; though many of the antients gave the name of xiphoides to the whole sternum; comparing the two first bones to the handle, and this appendix to the blade of the sword. The shape of this appendix varies in different subjects; in some it is longer and more pointed, in others shorter and more obtuse. Veslingius has seen it reaching as low as the navel, and incommoding the motion of the trunk forwards. In general it terminates obtusely, or in a single point; sometimes, however, it is bifurcated, and Eustachius and Haller have seen it trifid. Very often we find it perforated, for the transmission of branches of the mammary artery. In the adult it is usually ossified and tipped with cartilage, but it very often continues cartilaginous through life, and Haller once found it in this state in a woman who died in her hundredth year.

The substance of the sternum, internally, is of a light, spongy texture, covered externally with a thin bony plate; hence it happens that this bone is easily fractured. From the description we have given of it, its uses may be easily understood. We have seen it serving for the articulation of seven true ribs on each side, and hence we shall find it of considerable use in respiration. We likewise observed, that it is articulated with each of the clavicles. It serves for the origin and insertion of several muscles; it supports the mediastinum; and lastly, defends the heart and lungs; and it is observable, that we find a similar bone in almost all animals that have lungs, and even in such as have no ribs, of which latter we have an instance in the frog.

Sternutamento′ria. See *Achillea ptarmica.*

STE′RTOR. A noisy kind of respiration, as is observed in apoplexy. A snoring, or snorting.

STHE′NIA. A term employed by the followers of Dr. Brown, to denote that state of the body which disposes to inflammatory diseases in opposition to those of debility, which arise from asthenia.

Stibia′lia. (From *stibium,* antimony.) Antimonials. Medicines whose chief ingredient is antimony.

Sti′bii esse′ntia. Antimonial wine.

STI′BIUM. (Στιϐιον: from ϛιλϐω, to shine.) An antient name of antimony. See *Antimony.*

STI′GMA. (Στιγμα: from ϛιζω, to inflict blows.) A small red speck in the skin, occasioning no elevation of the cuticle. Stigmata are generally distinct, or apart from each other. They sometimes assume a livid colour, and are then termed *petechiæ.*

Stilbo′ma. (From ϛιλϐω, to polish.) A cosmetic.

STILLICI′DIUM. (From *stillo,* to drop, and *cado,* to fall.) A strangury, or discharge of the urine drop by drop. Also the pumping upon a part.

Sti′mmi. Στιμμι. Antimony.

STIMULANTS. (*Stimulantia,* sc. *medicamenta;* from *stimulo,* to stir up.) Medicines are so termed which possess a power of exciting the animal energy. They are divided into, 1. *Stimulantia tonica,* as *sinapi, cantharides, mercurii præparationes.* 2. *Stimulantia diffusibilia,* as *alkali volatile, electricity, heat,* &c. 3. *Stimulantia cardiaca,* as *cinnamomum, nux moschata, wine,* &c.

STI′MULUS. Any thing which irritates.

Stinking lettuce. See *Lactuca virosa.*

Stizolo′bium. The cowage is sometimes so called. See *Dolichos,*

Stoe′chas. (From ϛοιχαδες, the islands on which it grew.) French lavender.

Stoe′chas ara′bica. French lavender. See *Lavendula stœchas.*

Stoe′chas citrina. See *Gnaphalium stœchas.*

STOMACA′CE. (From ϛομα, the mouth, and κακος, evil.) Canker. A fetor in the mouth, with a bloody discharge from the gums. It is generally a symptom of the scurvy. It is also a name for the scurvy.

STOMACH. (The word *stomachus* properly belongs to the upper orifice of the stomach, though given to the whole viscus.) *Ventriculus. Anocœlia. Gaster. Nedys.* A membranous receptacle, situated in the epigastric region, which receives the food from the œsophagus; its figure is somewhat oblong and round: it is largest on the left side, and gradually diminishes towards its lower orifice, where it is the least. Its superior orifice, where the œsophagus terminates, is called the *cardia;* the inferior orifice, where the intestine begins, the *pylorus.* The anterior surface is turned towards the abdominal muscles, and the posterior opposite the lumbar vertebræ. It has two curvatures: the first is called the great curvature of the stomach, and extends downwards, from one orifice to the other, having the omentum adhering to it; the second is the small curvature, which is also between both orifices, but superiorly and posteriorly. The stomach, like the intestinal canal, is composed of three coats, or membranes: 1. The *outermost,* which is very firm, and from the peritonæum. 2. The *muscular,* which is very thick, and composed of various muscular fibres; and, 3. The *innermost,* or *villous coat,* which is covered with exhaling and inhaling vessels, and mucus. These coats are connected together by cellular membrane. The glands of the stomach which separate the mucus are situated between the villous and muscular coat, in the cellular structure. The arteries of the stomach come chiefly from the cæliac artery, and are distinguished into the coronary, gastro-epiploic, and short arteries; they are accompanied by veins which have similar names, and which terminate in the vena portæ. The nerves of the stomach are very numerous, and come from the eighth pair and intercostal nerves. The lymphatic vessels are distributed throughout the whole substance, and proceed immediately to the thoracic duct. The use of the stomach is to excite hunger and partly thirst, to receive the food from the œsophagus, and to retain it, till, by the motion of the stomach, the admixture of various fluids, and many other changes, it is rendered fit to pass the right orifice of the stomach, and afford chyle to the intestines.

Stomach, inflammation of. See *Gastritis.*

Stoma′chica pa′ssio. A disorder in which there is an aversion to food, even the thought of it begets a nausea, anxiety, cardialgia, an effusion of saliva, and often a vomiting. Fasting is more tolerable than eating; if obliged to eat a pain follows that is worse than hunger itself.

STOMACHICS. (*Stomachica,* sc. *medicamenta;* from ϛομαχος, the stomach.)

Medicines which excite and strengthen the action of the stomach.

Sto′machus. See *Stomach.*

Stone. See *Calculus.*

Stone-crop. See *Sedum acre.*

STO′RAX. Στοραξ. See *Styrax.*

Storax, liquid. See *Liquidambra.*

Sto′rax li′quida. See *Liquidambra.*

Sto′rax ru′bra officina′lis. Cascarilla bark.

Storax, white. See *Myroxylon peruiferum.*

STORCK, Anthony, a medical professor of considerable note at Vienna, who succeeded the celebrated Van Swieten as president and director of the faculty of medicine in that university, and was also honoured with the appointment of principal consulting physician to the Empress Maria Theresa. He distinguished himself chiefly by a long and assiduous course of experiments with various narcotic vegetables, as hemlock, henbane, stramonium, aconite, colchicum, &c.: of which, though he appears to have over-rated the efficacy, yet certainly he had the merit of calling the attention of practitioners to a class of active remedies, which may often be highly useful under prudent management. His various tracts on these subjects were printed between 1760 and 1771, and they have since passed through several editions and translations. He was also author of a collection of cases, which occurred under his observation in the hospital at Vienna; and this work was afterwards continued by his successor Dr. Collin.

Strabali′smus. See *Strabismus.*

STRABI′SMUS. (From ςραβιζω, to squint.) *Strabalismus. Strabositas.* Squinting. An affection of the eye by which a person sees objects in an oblique manner, from the axis of vision being distorted. Cullen arranges this disease in the Class, *Locales,* and Order, *Dyscinesiæ.* He distinguishes three species.

1. *Strabismus habitualis,* when from a custom of using only one eye.

2. *Strabismus commodus,* when one eye in comparison with the other, from greater weakness, or mobility, cannot accommodate itself to the other.

3. *Strabismus necessarius,* when some change takes place in the situation or figure of the eye, or a part of it.

Strabo′sitas. See *Strabismus.*

Stra′men camelo′rum. Camel's hay, or juncus odoratus.

Strammo′nium. See *Stramonium.*

STRAMO′NIUM. (From *stramen,* straw; so called from its fibrous roots.) See *Datura.*

Stramo′nium officina′le. See *Datura stramonium.*

Stramo′nium spino′sum. See *Datura Stramonium.*

Stra′ngalis. (From ςραγγευω, to torment.) A hard, painful tumour in the breast, from milk.

STRA′NGURY. (*Stranguria;* from ςραγξ, a drop, and ουρον, urine.) A difficulty of making water, attended with pain and dripping. See *Ischuria.*

Stratio′tes. (From ςρατος, an army; so named from its virtues in healing fresh wounds, and its usefulness to soldiers.) See *Achillea millefolium.*

Stratio′ticum. See *Achillea millefolium.*

Strawberry. See *Fragaria.*

STREATHAM WATERS. A weak purging water, drunk to the amount of one, two, or more pints in a morning.

Stre′mma. (Στρεμμα: from ςτρεφω, to turn.) A strain or sprain of the parts about a joint.

STRICTURE. A diminution, or contracted state of some tube, or duct, of the body; as the œsophagus, intestines, urethra, vagina, &c. They are either organical or spasmodic.

STRI′DOR DE′NTIUM. Grinding of the teeth.

Stri′gil. *Strigilis.* An instrument to scrape off the sweat during the gymnastic exercises of the antients, and in their baths: *strigils* were made of metals, horn, or ivory, and were curved. Some were made of linen.

Strigme′ntum. The strigment, filth, or sordes, scraped from the skin, in baths and places of exercises.

Stro′phos. (From ςρεφω, to turn.) A twisting of the intestines.

STRO′PHULUS. A papulous eruption peculiar to infants, and exhibiting a variety of forms, which are described by Dr. Willan, under the titles of *intertinctus, albidus, confertus, volaticus,* and *candidus.*

1. *Strophulus intertinctus,* (from *intertingo,* to spot here and there,) usually called the *red-gum,* and, by the French, *Efflorescence benigne.* The papulæ characterizing this affection, rise sensibly above the level of the cuticle, are of a vivid red colour, and commonly distinct from each other. Their number and extent varies much in different cases. They appear most constantly on the cheeks, fore-arm, and back of the hand, but are sometimes diffused over the whole body. The papulæ are, in many places, intermixed with stigmata, and often with red patches of a larger size, which do not, however, occasion any elevation of the cuticle. A child's skin thus variegated, somewhat resembles a piece of red printed linen; and hence this eruption was formerly called the *red gown,* a term which is still retained in several counties of England, and may be found in old dictionaries. Medical writers have changed the original word for one of a similar sound, but not more significant. The *strophulus intertinctus* has not, in general, any ten-

dency to become pustular, a few small pustules, containing a straw-coloured, watery fluid, occasionally appear on the back of the hand, but scarcely merit attention, as the fluid is always re-absorbed in a short time, without breaking the cuticle. The eruption usually terminates in scurf, or exfoliation of the cuticle; its duration, however, is very uncertain; the papulæ and spots sometimes remain for a length of time, without an obvious alteration; sometimes disappear and come out again daily; but, for the most part, one eruption of them succeeds another, at longer intervals, and with more regularity. This complaint occurs chiefly within the two first months of lactation. It is not always accompanied with, or preceded by any disorders of the constitution, but appears occasionally in the strongest and most healthy children. Some authors connect it with aphthous ulcerations common in children, supposing the latter to be a part of the same disease diffused along the internal surfaces of the mouth and intestines. The fact, however, seems to be, that the two affections alternate with each other: for those infants who have the papulous eruption on the skin are less liable to aphthæ; and when the aphthæ take place to a considerable degree, the skin is generally pale and free from eruption. The *strophulus intertinctus* is, by most writers, said to originate from an acidity, or acrimonious quality of the milk taken into a child's stomach, communicated afterwards to the blood, and stimulating the cutaneous excretories. This opinion might, without difficulty, be proved to have little foundation. The predisposition to the complaint may be deduced from the delicate and tender state of the skin, and from the strong determination of blood to the surface, which evidently takes place in infants. The papulous eruption is, in many cases, connected with a weak, irritable state of the alimentary canal, and consequent indigestion. For if it be by any means suddenly repelled from the surface, diarrhœa, vomiting, spasmodic affections of the bowels, and often general disturbance of the constitution succeed; but as soon as it re-appears, those internal complaints are wholly suspended. Dr. Armstrong and others have particularly noted this reciprocation, which makes the red-gum, at times, a disease of some importance, though in its usual form, it is not thought to be in any respect dangerous. On their remarks a necessary caution is founded, not to expose infants to a stream of very cold air, nor to plunge them unseasonably in a cold bath. The most violent, and even fatal symptoms have often been the consequence of such imprudent conduct.

2. The *Strophulus albidus*, by some termed the *white-gum*, is merely a variety of strophulus intertinctus, but deserves some notice on account of the different appearance of its papulæ. In place of those described as characterizing the red-gum, there is a number of minute whitish specks, a little elevated, and sometimes, though not constantly, surrounded by a slight redness. These papulæ, when their tops are removed, do not discharge any fluid; it is, however, probable that they are originally formed by the deposition of a fluid, which afterwards concretes under the cuticle. They appear chiefly on the face, neck, and breast, and are more permanent than the papulæ of the red gum. In other respects, they have the same nature and tendency, and require a similar plan of treatment. Although a distinctive name has been applied to this eruption, when occurring alone, yet it is proper to observe, that, in a great number of cases, there are red papulæ and spots intermixed with it, which prove its connection with the strophulus intertinctus.

3. The *Strophulus confertus*. (From *confercio*, to crowd together.) An eruption of numerous papulæ, varying in their size, appears on different parts of the body in infants, during dentition, and has thence been denominated the *tooth-rash*. It is sometimes also termed the *rank red-gum*. About the fourth or fifth month after birth, an eruption of this kind usually takes place on the cheeks and sides of the nose, extending sometimes to the forehead and arms, but rarely to the trunk or body. The papulæ on the face are smaller, and set more closely together than in the red-gum; their colour is not so vivid, but they are generally more permanent. They terminate at length with slight exfoliations of the cuticle, and often appear again in the same places, a short time afterwards. The papulæ which, in this complaint, occasionally appear on the back or loins, are much larger, and somewhat more distant from each other, than those on the face. They are often surrounded by an extensive circle of inflammation, and a few of them contain a semi-pellucid watery fluid, which is re-absorbed when the inflammation subsides. In the seventh or eighth month, the strophulus confertus assumes a somewhat different form; one or two large irregular patches appear on the arms, shoulder, or neck; in which the papulæ are hard, of a considerable size, and set so close together, that the whole surface is of a high red colour. Most commonly the fore-arm is the seat of this eruption, the papulæ rising first on the back of the hand, and gradually extending upwards along the arm. Sometimes, however, the eruption commences at the elbow, and proceeds a little upwards and downwards on the outside of the arm. It arrives at its height in about a fortnight, the papulæ then begin to fade, and become flat at the top, afterwards the cuticle exfoliates from the part affected, which remains discoloured, rough, and irregular, for a week or two longer.

An obstinate and very painful modification of this disease takes place, though not often, on the lower extremities. The papulæ spread from the calves of the legs to the thighs, nates, loins, and round the body, as high as the navel: being very numerous and close together, they produce a continuous redness over all the parts above mentioned.

The cuticle, presently, however, shrivelled, cracks in various places, and finally separates from the skin in large pieces. During this process a new cuticle is formed, notwithstanding which the complaint recurs in a short time, and goes through the same course as before. In this manner successive eruptions take place, during the course of three or four months, and perhaps do not cease till the child is one year old, or somewhat more. Children necessarily suffer great uneasiness from the heat and irritation occasioned by so extensive an eruption, yet while they are affected with it, they often remain free from any internal or febrile complaint. This appearance should be distinguished from the intertrigo of infants, which exhibits an uniform, red, smooth, shining surface, without papulæ; and which affects only the lower part of the nates and inside of the thighs, being produced by the stimulus of the urine, &c. with which the child's clothes are almost constantly wetted. The strophulus confertus, where the child is otherwise healthy, is generally ascribed to a state of indigestion, or some feverish complaint of the mother, or nurse. Dr. Willan, however, asserts that he has more frequently seen the eruption when no such cause was evident. It may, with more probability, be considered as one of the numerous symptoms of irritation, arising from the inflamed and painful state of the gums in dentition: since it always occurs during that process, and disappears soon after the first teeth have cut the gums.

4. The *Strophulus volaticus*, (from *volo*, to fly,) is characterized by an appearance of small circular patches, or clusters of papulæ, arising successively on different parts of the body. The number of papulæ in each cluster is from six to twelve. Both the papulæ and their interstices are of a high red colour. These patches continue red, with a little heat, or itching, for about four days, when they turn brown, and begin to exfoliate. As one patch declines, another appears at a small distance from it; and in this manner the complaint often spreads gradually over the face, body, and limbs, not terminating in less than three or four weeks. During that time the child has sometimes a quick pulse, a white tongue, and seems uneasy and fretful. In many cases, however, the eruption takes place without any symptoms of internal disorder. The above complaint has been by some writers denominated *ignis volaticus infantum*: under this title Astruc and Lorry have described one of the forms of crusta lactea, in which a successive eruption of pustules takes place on the same spot generally about the mouth or eyes, in children of different ages, and sometimes in adults. The *maculæ volaticæ infantum* mentioned by Wittichius, Sennertus, and Sebizeus, agree in some respects with the strophulus volaticus; but they are described by other German authors as a species of erysipelas, or as irregular efflorescences affecting the genitals of infants, and often proving fatal. The strophulus volaticus is a complaint by no means frequent. In most cases which have come under Dr. Willan's observation, it appeared between the third and sixth month; in one instance, however, it occurred about ten days after birth, and continued three weeks, being gradually diffused from the cheeks and forehead to the scalp, afterwards to the trunk of the body and to the extremities; when the patches exfoliated, a red surface was left, with a slight border of detached cuticle.

5. *Strophulus candidus.* (From *candeo*, to shine.) In this form of strophulus, the papulæ are larger than in any of the foregoing species. They have no inflammation round their base; their surface is very smooth and shining, whence they appear to be of a lighter colour than the adjoining cuticle. They are diffused, at a considerable distance from each other, over the loins, shoulders, and upper part of the arms; in any other situation they are seldom found.

This eruption affects infants about a year old, and most commonly succeeds some of the acute diseases to which they are liable. Dr. Willan has observed it on their recovery from a catarrhal fever, and after inflammation of the bowels, or lungs. The papulæ continue hard and elevated for about a week, then gradually subside and disappear.

STRU′MA. (From *struo*, to heap up.) This term is applied by some authors to scrofula, and by others to an induration of the thyroid gland, which is endemial to the Tyrolese, Swiss, and others.

Stru′men. (From *struma*, a scrofulous tumour.) A herb so called from its uses in healing strumous tumours.

Stru′thium. (From *ϛρυθος*, a sparrow; so named from the resemblance of its flowers to an unfledged sparrow.) The masterwort. See *Imperatória.*

Strychnoma′nia. (From *ϛρυχνος*, night-shade, and *μανια*, madness.) So the antients called the disorder produced by eating the deadly night-shade.

STRY′CHNOS. (From *τρυχω*, to torment; so named from its properties of producing insanity.) The name of a genus of plants in the Linnæan system.

Stry′chnos nux vo′mica. The systematic name of the tree whose seed is called the poison-nut. *Nux vomica. Nux metella.* The nux vomica, lignum colubrinum, and faba sancti Ignatii, have been long known in the Materia Medica as narcotic poisons, brought from the East Indies, while the vegetables which produced them were unknown, or at least not botanically ascertained.

By the judicious discrimination of Linnæus, the nux vomica was found to be the fruit of the tree described and figured in the Hortus Malabaricus, under the name of *Caniram, cucurbitifera malabariensis*, of Plukenet; *Vomica*, of Linnæus. Now called *Strychnos nux vomica.*

To this genus also, but upon evidence less conclusive, he likewise justly referred the colubrinum. But the faba sancti Ignatii he merely conjectured might belong to this family, as appears by the query, *An Strychni species?* which subsequent discoveries have enabled us to decide in the negative; for, in the Supp. Plant, it constitutes the new genus *Ignatia*, which Loureiro has lately confirmed, changing the specific name *amara* to that of *philippinica.* The strychnos and ignatia are, however, nearly allied, and both rank under the Order, *Solanaceæ.*

Dr. Woodville has inquired thus far into the botanical origin of these productions, from finding that, by medical writers, they are generally treated of under the same head, and in a very confused and indiscriminate manner. The seed of the fruit, or berry of this tree, *Strychnos nux vomica*, is the officinal nux vomica: it is flat, round, about an inch broad, and near a quarter of an inch thick, with a prominence in the middle on both sides, of a grey colour, covered with a kind of woolly matter; and internally hard and tough like horn. To the taste it is extremely bitter, but has no remarkable smell. It consists chiefly of a gummy matter, which is moderately bitter; the resinous part is very inconsiderable in quantity, but intensely bitter; hence rectified spirit has been considered its best menstruum.

Nux vomica is reckoned amongst the most powerful poisons of the narcotic kind, especially to brute animals; nor are instances wanting of its deleterious effects upon the human species. It proves fatal to dogs in a very short time, as appears by various authorities. Hillefeld and others found that it also poisoned hares, foxes, wolves, cats, rabbits, and even some birds, as crows and ducks; and Loureiro relates, that a horse died in four hours after taking a drachm of the seed in an half-roasted state.

The effects of this baneful drug upon different animals, and even upon those of the same species appear to be rather uncertain, and not always in proportion to the quantity of the poison given. With some animals it produces its effects almost instantaneously; with others, not till after several hours, when laborious respiration, followed by torpor, tremblings, coma, and convulsions, usually precede the fatal spasms, or tetanus, with which this drug commonly extinguishes life.

From four cases related of its mortal effects upon human subjects, we find the symptoms corresponded nearly with those which we have here mentioned of brutes; and these, as well as the dissections of dogs killed by this poison, not shewing any injury done to the stomach or intestines, prove that the nux vomica acts immediately upon the nervous system, and destroys life by the virulence of its narcotic influence.

The quantity of the seed necessary to produce this effect upon a strong dog, as appears by experiments, need not to be more than a scruple; a rabbit was killed by five, and a cat by four, grains: and of the four persons to whom we have alluded, and who unfortunately perished by this deleterious drug, one was a girl ten years of age, to whom fifteen grains were exhibited at twice for the cure of an ague. Loss, however, tells us, that he took one or two grains of it in substance, without discovering any bad effect; and that a friend of his swallowed a whole seed without injury.

In Britain, where physicians seem to observe the rule *Saltem non nocere*, more strictly than in many other countries, the nux vomica has been rarely, if ever, employed as a medicine. On the continent, however,and especially in Germany,they have certainly been guided more by the axiom, "What is incapable of doing much harm, is equally unable to do much good." The truth of this remark was lately very fully exemplified by the practice of Baron Störck, and is farther illustrated by the medicinal character given of nux vomica, which from the time of Gesner till that of a modern date, has been recommended by a succession of authors as an antidote to the plague, as a febrifuge, as a vermifuge, and as a remedy in mania, hypochondriasis, hysteria, rheumatism, gout, and canine madness. In Sweden, it has of late years been successfully used in dysentery; but Bergius, who tried its effects in this disease, says, that it suppressed the flux for twelve hours, which afterwards returned again. A woman, who took a scruple of this drug night and morning, two successive days, is said to have been seized with convulsions and vertigo, notwithstanding which the dysenteric symptoms returned, and the disorder was cured by other medicines; but a pain in the stomach, the effect of the nux vomica, continued afterwards for a long time.

Bergius, therefore, thinks it should only be administered in the character of a tonic and anodyne, in small doses, (from five to ten grains,) and not till after proper laxatives have been employed. Loureiro recommends it as a valuable internal medicine in fluor albus; for which purpose he roasts it till it becomes perfectly black and friable, which renders its medicinal use safe, without impairing its efficacy. It is said to have been used successfully in the cure of agues, and has also been reckoned a specific in pyrosis, or water-brash.

Stry′chnos volu′bilis. The systematic name of the tree which was supposed to afford the Jesuit's bean. See *Ignatia amara*.

Stupefacie′ntia. (From *stupefacio*, to stupefy.) Narcotics.

Stu′pha. (From ϛυφω, to bind.) *Stupa. Stuppa.* A stupe; the same as fomentation.

STU′POR. (From *stupeo*, to be senseless.) Insensibility.

Stu′por de′ntium. Commonly called teeth on-edge.

Stu′ppa. See *Stupha*.

Stye. See *Hordeolum*.

Sty′gia. (From *Styx*, a name given by the poets to one of the rivers in hell.) A water made from sublimate, and directed in old dispensatories, so called from a supposition of its poisonous qualities. The *Aqua Regia* is also thus sometimes called, from its corrosive qualities.

Styliform. (*Styliformis*; from *stylus*, a bodkin, and *forma*, a likeness.) Shaped like a bodkin, or style.

Styli′scus. (From ϛυλος, a bodkin.) A tent made in the form of a bodkin.

STYLO. Names compounded of this word belong to muscles which are attached to the styloid process of the temporal bone; as,

Stylo-cerato-hyoide′us. See *Stylo-hyoideus*.

Stylo-chondro-hyoide′us. See *Stylo-hyoideus*.

STYLO-GLO′SSUS. (*Musculus stylo-glossus.*) *Stylo-glosse*, of Dumas. A muscle situated between the lower jaw and os hyoides laterally, which draws the tongue aside and backwards. It arises tendinous and fleshy from the styloid process, and from the ligament which connects that process to the angle of the lower jaw, and is inserted into the root of the tongue, runs along its sides, and is insensibly lost near its tip.

STYLO-HYOIDE′US. (*Musculus stylo-hyoideus.*) *Stylo-hyoidien*, of Dumas. A muscle situated between the lower jaw and os hyoides laterally, which pulls the os hyoides to one side and a little upwards.

It is a small, thin, fleshy muscle, situated between the styloid process and os hyoides, under the posterior belly and middle tendon of the digastricus, near the upper edge of that muscle.

It arises by a long thin tendon, from the basis and posterior edge of the styloid process, and, descending in an oblique direction, is inserted into the lateral and anterior part of the os hyoides, near its horn.

The fleshy belly of this muscle is usually perforated on one or both sides, for the passage of the middle tendon of the digastricus.

Sometimes, though not always, we find another smaller muscle placed before the stylo-hyoideus, which, from its having nearly the same origin and insertion, and the same use, is called *stylo-hyoideus-alter*. It seems to have been first known to Eustachius; so that Douglas was not aware of this circumstance when he placed it amongst the muscles discovered by himself. It arises from the apex of the styloid process, and sometimes, by a broad and thin aponeurosis, from the inner and posterior part of the angle of the lower jaw, and is inserted into the appendix, or little horn, of the os hyoides.

The use of these muscles is to pull the os hyoides to one side, and a little upwards.

Stylo-hyoide′us a′lter. See *Stylo-hyoideus*.

STYLO-MASTOID FORAMEN. *Foramen stylo-mastoideum.* A hole between the styloid and mastoid process of the temporal bone, through which the portio dura of the auditory nerve passes to the temples.

STYLO-PHARYNGE′US. (*Musculus stylo-pharyngeus.*) *Stylo-thyro-pharyngien*, of Dumas. A muscle situated between the lower jaw and os hyoides laterally, which dilates and raises the pharynx and thyroid cartilage upwards. It arises fleshy from the root of the styloid process, and is inserted into the side of the pharynx and back part of the thyroid cartilage.

Stymato′sis. (From ϛυω, to have a priapism.) A violent erection of the penis, with a bloody discharge.

Stypte′ria. (From ϛυφω, to bind; so called from its astringent properties.) Alum.

STYPTICS. (*Medicamenta styptica*, from ϛυφω, to adstringe.) A term given to those substances which possess the power of stopping hæmorrhages, such as turpentine, alum, &c.

Styraci′flua. (From *styrax*, storax, and *fluo*, to flow.) Liquid storax. See *Liquidambra*.

STY′RAX. (From ϛυραξ, a reed, in which it was used to be preserved.)

1. The name of a genus of plants in the Linnæan system. Class, *Decandria*. Order, *Monogynia*.

2. The pharmacopœial name of the *Styrax calamita*.

Sty′rax a′lba. See *Myroxylon peruiferum*.

Sty′rax be′nzoin. The systematic name of the tree which affords the gum benzoin.

Benzoë. Benjoinum. Assa dulcis. Assa odorata. Liquor cyreniacus. Balzoinum. Benzoin. Benjui. Benjuin. Gum-benjamin. This substance is classed, by modern chemists, among the balsams. There are two kinds of benzoin: *benzoe amygdaloides*, which is formed of white tears, resembling almonds, united together by a brown matter; and *common benzoin*, which is brown and without tears. The tree which affords this balsam, formerly called *Laurus benzoin. Benzoïfera. Arbor benici*, is the *Styrax, foliis oblongis acuminatis, subtus tomentosis, racemis compositis longitudine foliorum*, of Dryander, from which it is obtained by incisions. The benzoin of the shops is usually in very large brittle masses. When chewed, it imparts very little taste, except that it impresses on the palate a slight sweetness; its smell, especially when rubbed or heated, is extremely fragrant and agreeable. It has rarely been used medicinally in a simple state, but its preparations are much esteemed against inveterate coughs and phthisical complaints, unattended with much fever; it has also been used as a cosmetic, and in the way of fumigation, for the resolution of indolent tumours. The acid of benzoin is employed in the *tinctura camphoræ composita*, and a tincture is directed to be made of the balsam.

Sty′rax calami′ta. Storax in the cane, because it was formerly brought to us in reeds, or canes. See *Styrax benzoin*.

Sty′rax cola′ta. Strained storax.

Sty′rax li′quida. Liquid storax. See *Liquidambra*.

Sty′rax officina′lis. The systematic name of the tree which affords the solid storax. Officinal storax. *Styrax, foliis ovatis, subtus villosis, racemis simplicibus folio brevioribus*, of Linnæus. There are two kinds of storax to be found in the shops; the one is usually in irregular compact masses, free from impurities, of a reddish-brown appearance, and interspersed with whitish tears, somewhat like gum ammoniac, or benzoin; it is extremely fragrant, and upon the application of heat readily melts. This has been called *storax in lump, red storax;* and when in separate tears, *storax in tears*. The other kind, which is called the *common storax*, is in large masses, very light, and bears no external resemblance whatever to the former storax, as it seems almost wholly composed of dirty saw-dust, caked together by resinous matter. Storax was formerly used in catarrhal complaints, coughs, asthmas, obstructions, &c. In the present practice it is almost totally disregarded, notwithstanding it is an efficacious remedy in nervous diseases.

Sty′rax ru′bra. Red storax, or storax in the tear.

Subace′tas cu′pri. See *Verdigris*.

Subacetate of copper. See *Verdigris*.

Subala′ris ve′na. The vein of the axilla or arm-pit.

Subcarbo′nas pota′ssæ. See *Potassæ subcarbonas*.

Subcarbo′nas fe′rri. See *Ferri subcarbonas*.

Subcarbo′nas plu′mbi. See *Plumbi subcarbonas*.

Subcartilagi′neum. (From *sub*, under, and *cartilago*, a cartilage.) The hypochondrium, or part of the body which lies under the cartilages of the spurious ribs.

SUBCLAVIAN ARTERY. (From *sub*, under, and *clavis*, a key, because the clavicles were supposed to resemble the key of the antients.) The right subclavian arises from the arteria innominata, and proceeds under the clavicle to the axilla. The left subclavian arises from the arch of the aorta, and ascends under the left clavicle to the axilla. The subclavians in their course give off the internal mammary, the cervical, the vertebral, and the superior intercostal arteries.

SUBCLAVIAN VEIN. This receives the blood from the veins of the arm, and runs into the vena cava superior.

SUBCLA′VIUS. (*Musculus subclavius;* from *sub*, under, and *clavicula*, the channel bone, as being situated under the clavicle, or channel bone.) *Subclavianus. Costo-claviculaire*, of Dumas. A muscle, situated on the anterior part of the thorax, which pulls the clavicle downwards and forwards. It arises tendinous from the cartilage that joins the first rib to the sternum, is inserted after becoming fleshy into the inferior part of the clavicle, which it occupies from within an inch of the sternum as far outwards as to its connection, by a ligament, with the coracoid process of the scapula.

SUBCRURÆ′I. Two little muscular slips sometimes found under the cruræus; they are inserted into the capsular ligament which they pull up.

SUBCUTANEOUS GLANDS. *Glandulæ subcutaneæ.* These are sebaceous glands lying under the skin, which they perforate by their excretory ducts.

Subcuta′neus. The platysma myoides muscle.

Suber. Cork. The cork-tree. See *Quercus suber*.

Sublimame′ntum. (From *sublimo*, to lift up.) The pendulous substance which floats in the middle of the urine.

Sublimate. See *Hydrargyri oxymurias*.

SUBLIMATION. (*Sublimatio*, from *sublimo*, to raise or sublime.) This chemical process differs from evaporation only in being confined to solid substances. It is usually performed either for the purpose of purifying certain substances, and disengaging them from extraneous matters; or else to reduce into vapour, and combine, under that form, principles which would have united with greater difficulty if they had not been brought to that state of extreme division.

As all fluids are volatile by heat, and consequently capable of being separated, in most cases, from fixed matters, so various solid bodies are subjected to a similar treatment. Fluids are said to distil, and solids to sublime, though sometimes both are obtained in one and the same operation. If the subliming matter concretes into a solid hard mass, it is commonly called a sublimate; if into a powdery form, flowers.

The principal subjects of this operation are, volatile alkaline salts; neutral salts, composed of volatile alkali and acids, as sal ammoniac; the salt of amber, and flowers of benzoin, mercurial preparations, and sulphur. Bodies of themselves not volatile are frequently made to sublime by the mixture of volatile ones; thus iron is carried over by sal ammoniac in the preparation of the flores martiales, or ferrum ammoniatum.

The fumes of solid bodies in close vessels rise but a little way, and adhere to that part of the vessel where they concrete.

SUBLI'MIS. See *Flexor brevis digitorum pedis*, and *Flexor sublimis perforatus.*

SUBLINGUAL GLANDS. *Glandulæ sublinguales* vel *Bartholinianæ* vel *Rivinianæ.* The glands which are situated under the tongue, and secrete saliva. Their excretory ducts are called *Rivinian* from their discoverer.

SUBLUXA'TIO. A sprain.

SUBMERSION. (*Submersio*, from *sub*, under, and *mergo*, to sink.) Drowning. A variety of the apoplexia suffocata. Sauvages terms it asphyxia immersorum.

Submu'rias hydra'rgyri. See *Hydrargyri submurias.*

Suborbita'rius. The suborbitary nerve; a branch of the fifth pair.

SUBSCAPULA'RIS. (*Musculus subscapularis*, from *sub*, under, and *scapula*, the shoulder-blade.) *Sous-scapulo-trochinien*, of Dumas. The name of this muscle sufficiently indicates its situation. It is composed of many fasciculi of tendinous and fleshy fibres, the marks of which we see imprinted on the under surface of the scapula. These fasciculi, which arise from all the basis of that bone internally, and likewise from its superior, as well as from one-half of its inferior costa, unite to form a considerable flat tendon which adheres to the capsular ligament, and is inserted into the upper part of the lesser tuberosity at the head of the os humeri.

The principal use of this muscle is to roll the arm inwards. It likewise serves to bring it close to the ribs; and, from its adhesion to the capsular ligament, it prevents that membrane from being pinched.

SUBSU'LTUS TE'NDINUM. (*Subsultus*, from *subsulto*, to leap.) Weak convulsive motions or twitchings of the tendons, mostly of the hands, generally observed in the extreme stages of putrid fever.

Subu'beres. (From *sub*, under, and *ubera*, the breasts.) This term hath been used by some writers for those infants who yet suck, in distinction from those who are weaned, and then are called *exuberes.*

Succa'go. The rob or conserve of fruit.

SUCCEDA'NEUM. A medicine substituted for others.

Succenturia'ti mu'sculi. The pyramidal muscles of the belly.

Succenturia'ti re'nes. Two glands lying above the kidneys.

SUCCINATE. *Succinas.* Salts formed by the combination of the acid of amber, or succinic acid, with different bases; as, *succinate of potash*, *succinate of copper*, &c.

Succi'ngens membra'na. The diaphragm.

SUCCINIC ACID. *Acidum succinicum. Sal succini.* The succinic acid is drawn from amber by sublimation in a gentle heat, and rises in a concrete form into the neck of the subliming vessel. The operation must not be pushed too far, nor by too strong a fire, otherwise the oil of amber rises along with the acid.

SU'CCINUM. (From *succus*, juice; because it was thought to exude from a tree.) See *Amber.*

Su'ccinum cine'reum. The ambergris is so called by some authors. See *Ambergris.*

Su'ccinum gri'seum. The ambergris is sometimes so called. See *Ambergris.*

Su'ccinum o'leum. See *Oleum succini.*

Su'ccinum prepara'tum. Prepared amber. See *Amber.*

Succi'sa. (From *succido*, to cut; so named from its being indented, and as it were cut in pieces.) Devil's bit. A species of the genus *Scabiosa.*

Su'cci scorbu'tici. The juice of English scurvy-grass, &c.

Succory. See *Cichorium.*

Su'ccubus. See *Incubus.*

SU'CCUS. Juice.

Su'ccus aca'ciæ ve'ræ. See *Acacia vera.*

Su'ccus aconi'ti spissa'tus. See *Aconitum.*

Su'ccus ba'ccæ sambu'ci spissa'tus. An aperient and deobstruent extract, often employed diluted with water in the cure of catarrhal affections.

Su'ccus bellado'nnæ spissa'tus. See *Atropa Belladonna.*

Su'ccus cicu'tæ spissa'tus. See *Conium.*

Su'ccus cochlea'riæ compo'situs. A warm aperient and diuretic, mostly exhibited in the cure of diseases of the skin arising from scurvy.

Su'ccus cyreni'acus. Juice of laserwort.

Su'ccus ga'stricus. See *Gastric juice.*

Su'ccus glycirrhi'zæ. Spanish liquorice.

Su'ccus heliotro'pii. See *Croton tinctorium.*

Su'ccus hyoscy'ami spissa'tus. See *Hyoscyamus.*

Su'ccus i'ndicus pu'rgans. Gamboge.

Su'ccus lactu'cæ viro'sæ spissa'tus. See *Lactuca virosa.*

Su'ccus limo'nis spissa'tus. See *Citrus medica.*

Su'ccus liquori'tiæ. Spanish liquorice.

Su'ccus pruno'rum sylve'strium. *Acacia Germanica.* See *Prunus spinosa.*

Su'ccus spissa'tus bacco'rum sambu'ci. Rob of elder-berries.

SUDA'MINA. (*Sudamen*, from *sudor*, sweat.) *Hidroa. Boa.* Vesicles resembling millet-seeds in form and magnitude, which appear suddenly, without fever, especially in the summer-time after much labour and sweating.

Suda'tio. (From *sudor*, sweat.) A sweating. See *Ephidrosis.*

Sudato'rium. (From *sudo*, to sweat.) A stew or sweating-house.

Su'dor a'nglicus. Called also *Hydronosus. Hydropyretos. Gargeatio.* The sweating sickness of England; an endemic fever. Dr. Cullen thinks it a species of typhus. This disorder is thus named from its first appearing in this island, and acquires the title of sudor, from the patient suddenly breaking out into a profuse sweat, which forms the great character of the disease.

SUDORI'FICA. (*Sudorifica*, sc. *medicamenta*, from *sudor*, sweat, and *facio*, to make.) *Hydrotica. Hydrotopsea.* A synonym of diaphoretics. See *Diaphoretics.*

Suffime'ntum. (From *suffimen*, a perfume.) *Hypocapnisma.* A suffumigation, a perfume.

Suffi'tus. The same.

Suffoca'tio hyste'rica. A convulsive affection of the throat.

Suffoca'tio stri'dula. The croup.

Suffumigation. (*Suffumigatio*, from *sub*, under, and *fumigo*, to smoke.) The burning odorous substances to remove an evil smell, or destroy miasma.

Suffu'sio. (From *suffundo*, to pour down; so called because the antients supposed the opacity proceeded from something running under the crystalline humour.) A cataract.

Suffu'sio aurigino'sa. A jaundice.

Sugar. See *Saccharum.*

Sugar of Lead. See *Plumbi superacetas.*

Sugar of Milk. A substance produced from whey, which, if not sour, contains a saline substance to which this name has been given.

Sugillation. (*Sugillatio.* From *sugillo*, to stain.) A bruise. A spot or mark made by a leech or cupping-glass.

SU'LCUS. A groove or furrow; generally applied to the bones.

SU'LPHAS. (From *sulphur*, brimstone.) A sulphate or salt formed by the union of the sulphuric acid with different bases.

Su'lphas alumino'sus. Alum. See *Alumen.*

Su'lphas ammo'niæ. *Alkali volatile vitriolatum*, of Bergman. *Sal ammoniacum secretum*, of Glauber. *Vitriolum ammoniacale.* This salt has been found native in the neighbourhood of some volcanoes. It is esteemed diuretic and deobstruent, and exhibited in the same diseases as the muriate of ammonia.

Su'lphas cu'pri. See *Cupri sulphas.*

Su'lphas fe'rri. See *Ferri sulphas.*

Su'lphas hydra'rgyri. See *Hydrargyrus vitriolatus.*

Su'lphas magne'siæ. See *Magnesiæ sulphas.*

Su'lphas pota'ssæ. See *Potassæ sulphas.*

Su'lphas so'dæ. See *Sodæ sulphas.*

Su'lphas zi'nci. See *Zinci sulphas.*

Sulphate. See *Sulphas.*

Su'lphite. *Sulphis.* A salt formed by the combination of the sulphurous acid with different bases: as *sulphite of potash*, *ammoniacal sulphite*, &c.

SU'LPHUR. *Abric. Alcubrith. Anpater. Appebrioc. Aquala. Aquila. Chibur. Chybur. Cibur.* Sulphur, which is also known by the name of brimstone, is the only simple combustible substance which nature offers pure and in abundance. It was the first known of all. It is found in the earth, and exists externally in depositions, in sublimed incrustations, and on the surface of certain waters, principally near burning volcanoes. It is found combined with many metals. It exists in vegetable substances, and has lately been discovered in the albumen of eggs.

Sulphur in the mineral kingdom is either in a loose powder, or compact; and then either detached or in veins. It is found in the greatest plenty in the neighbourhood of volcanoes or pseudo-volcanoes, whether modern or extinct as at *Solfatara*, &c. and is deposited as a crust on stones contiguous to them, either crystallized or amorphous. It is frequently met with in mineral waters, and in caverns adjacent to volcanoes; sometimes also in coal-mines. It is found in combination with most of the metals. When united to iron it forms the mineral called *martial pyrites*, or *iron pyrites.* All the ores known by the name of *pyrites*, of which there are a vast variety, are combinations of sulphur with different metals; and hence the names of copper, tin, arsenical, &c. pyrites. It exists likewise in combination with alumine and lime; it then constitutes different kinds of schistus, or alum ores.

Physical Properties. — Sulphur is a combustible, dry, and exceedingly brittle body, of a pale lemon-yellow colour. Its specific gravity is 1.990. It is destitute of odour, except when rubbed or heated. It is of a peculiar faint taste. It frequently crystallizes in entire or truncated octahedra, or in needles. If a piece of sulphur of a considerable size, be very gently heated, as for example, by holding it in the hand and squeezing it firmly, it breaks to pieces with a crackling noise. It is a non-conductor of electricity, and hence it becomes electric by friction. When heated, it first softens before it melts, and its fusion commences at 218° Fahr.; it is capable of subliming at a lower temperature; and takes fire at 560°. In the beginning of fusion it is very fluid, but by continuing the heat it grows tough, and its colour changes to a reddish brown. If in this condition it be poured into water, it remains as soft as wax, and yields to any impression. In time, however, it hardens again, and recovers its former consistence.

It unites with most of the earths and with all alkalies, and becomes soluble, when thus combined, in water. It unites to most of the metals, and renders them brittle and fusible. It is soluble in oils; water takes up a minute quantity, as does ardent spirit by means of heat. It dissolves in hydrogen gas. It does not readily combine with charcoal, but unites to phosphorus by fusion.

Sulphur, like all combustible bodies, burns in proportion to the quantity of oxygen which combines with it. Sulphur, heated in a close vessel, sublimes without alteration. It is not changed by exposure to air. It is attacked by the nitric acid when poured on it in its fused state.

If melted sulphur be exposed in the open air to an increase of heat, it takes fire and burns with a blue flame and suffocating vapour. The result of this combustion is sulphurous acid. According to the slow or rapid combustion, it absorbs different quantities of oxigen, and the produced acid differs in its properties.

Method of obtaining Sulphur. — A prodigious quantity of sulphur is obtained from Solfatara in Italy. This volcanic country every where exhibits marks of the agency of subterraneous fires; almost all the ground is bare, and white; and is every where sensibly warmer than the atmosphere, in the greatest heat of summer; so that the feet of persons walking there are burnt through their shoes. It is impossible not to observe the sulphur, for a sulphurous vapour which rises through different apertures is every where perceptible, and gives reason to believe that there is a subterraneous fire underneath from which that vapour proceeds.

From pyrites sulphur is extracted in the large way by the following process:

Pyrites is broken into small pieces, and put into large earthen tubes which are exposed to the heat of a furnace. A square vessel of cast iron, containing water, is connected as a receiver with the tube in the furnace. The action of the fire proceeds, and the sulphur, being thus melted, is gradually accumulated on the water in the receiver. It is then removed from this receiver, and melted in large iron ladles; in consequence of which, the earthy parts with which it was contaminated are made to subside to the bottom of the ladle, leaving the purified sulphur above. It is then again melted and suffered to cool gradually, in order to free it from the rest of the impurities. It is then tolerably pure, and constitutes the sulphur we meet with in large masses or lumps in the market.

In order to form it into rolls, it is again melted and poured into cylindrical wooden moulds, in these it takes the form in which we usually see it in commerce, as roll sulphur.

Flowers of sulphur, as they are called, are formed by subliming purified sulphur with a gentle heat in close rooms, where the sublimed sulphur is collected, though the article met with in general under that name is nothing but sulphur finely powdered.

Method of purifying Sulphur. — Take one part of flowers of sulphur, boil it in twenty parts of distilled water in a glass vessel for about a quarter of an hour; let the sulphur subside, decant the water, and then wash the sulphur repeatedly in distilled water: having done this, pour over it three parts of pure nitro-muriatic acid, diluted with one part of distilled water, boil it again in a glass vessel for about a quarter of an hour, decant the acid, and wash the sulphur in distilled water till the fluid passes tasteless, or till it does not change the blue colour of tincture of cabbage, or litmus. The sulphur thus carefully treated is *pure sulphur* fit for philosophical experiments.

Sulphur has been long an esteemed article of the Materia Medica; it stimulates the system, loosens the belly, and promotes the insensible perspiration. It pervades the whole habit, and manifestly transpires through the pores of the skin, as appears from the sulphurous smell of persons who have taken it, and from silver being stained in their pockets of a blackish colour. In the stomach it is probably combined with hydrogen. It is a celebrated remedy against cutaneous diseases, particularly psora, both given internally and applied externally. It has likewise been recommended in rheumatic pains, flying gout, rickets, atrophy, coughs, asthmas, and other disorders of the breast and lungs, and particularly in catarrhs of the chronic kind, also in colica pictonum, worm cases, and to lessen salivation.

In hæmorrhoidal affections it is almost specific; but in most of these cases it is advantageously combined with some cooling purgative, especially supertartrate of potash.

The preparations of sulphur directed to be used by the London and Edinburgh Colleges, are the Sulphur lotum, Sulphur præcipitatum, and Sulphur sublimatum.

Su′lphur antimo′nii præcipita′tum. *Sulphur auratum antimonii.* This preparation of antimony appears to have rendered that called *kermes mineral* unnecessary. It is a yellow hydro-sulphuret of antimony, and therefore called *hydro-sulphuretum stibii luteum.* As an alterative and sudorific it is in high estimation, and given in diseases of the skin and glands; and joined with calomel, it is one of the most powerful and penetrating alteratives we are in possession of.

Su′lphur aura′tum antimo′nii. See *Sulphur antimonii præcipitatum.*

Su′lphur lo′tum. Washed sulphur, Flores sulphuris loti. "Take of sublimed sulphur, a pound. Pour on boiling water so that the acid, if there be any, may be entirely washed away; then dry it." The dose is from half a drachm to two drachms.

Su′lphur præcipita′tum. *Lac sulphuris.* "Take of sublimed sulphur, a pound, fresh lime, two pounds, water four gallons; boil the sulphur and lime together in the water, then strain the solution through paper, and drop in as much muriatic acid as may be necessary to precipitate the sulphur; lastly, wash this by repeated affusions of water until it is tasteless." This preparation is mostly preferred to the flowers of sulphur, in consequence of its being freed from its impurities. The dose is from half a drachm to three drachms.

Su′lphur Sublima′tum. Sublimed sulphur. See *Sulphur.*

Su′lphur vi′vum. Native sulphur.

Sulphur-wort. See *Peucedanum.*

Sulphurated hydrogen gas. See *Hydrogen gas, sulphuretted.*

Sulphure. See *Sulphuret.*

Sulphureous acid. See *Sulphurous acid gas.*

Sulphuret. *Sulphuretum. Sulphure.* A combination of sulphur with different alkaline, earthy, and metallic bases.

Sulphure′tum ammo′niæ. *Hepar sulphuris volatile.* Boyle's or Beguine's fuming spirit. Sulphuret of ammonia is obtained in the form of a yellow fuming liquor, by the ammonia and sulphur uniting whilst in a state of gas during distillation. It excites the action of the absorbent system, and diminishes arterial action, and is given internally in diseases arising from the use of mercury, phthisis, diseases of the skin, and the phlegmasiæ: externally it is prescribed in the form of bath in paralysis, contractura, psora, and other cutaneous diseases.

Sulphure′tum ca′lcis. *Hepar calcis.* Sulphuret of lime. It is principally used as a bath in various diseases of the skin.

Sulphure′tum hydra′rgyri ni′grum. See *Hydrargyri sulphuretum nigrum.*

Sulphure′tum hydra′rgyri ru′brum. See *Hydrargyri sulphuretum rubrum.*

Sulphure′tum pota′ssæ. See *Potassæ sulphuretum.*

Sulphure′tum so′dæ. A combination of soda and sulphur.

Sulphure′tum sti′bii nati′vum. *Sulphuretum stibii nigrum. Antimonium crudum.* Native sulphuret of antimony. It is from this ore that all our preparations of antimony are made. See *Antimony.*

SULPHURIC ACID. *Acidum sulphuricum.* Oil of vitriol. Vitriolic acid. Sulphuric acid consists of sulphur, which constitutes its basis, and of oxygen. It frequently occurs in combination with alkalis, earths, and metals; but seldom in a state of purity, and whether at all, has been doubted. For chemical, medical, and other purposes, it is obtained by the rapid combustion of sulphur with nitre, and the decompostion of metallic and earthy sulphates by fire. If melted sulphur be exposed in open air to an increased heat, it takes fire, is entirely consumed, and burns with a flame, and an acid suffocating vapour. The sulphur is by this combustion changed to an acid. If the heat by which burning sulphur is consumed be only weak, its flame is blue, and the acid then generated is imperfect, very volatile, and aëriform. This imperfect sulphuric acid is the *sulphurous acid.* The sulphuric acid may be obtained by different methods; that prepared in England is by the combustion of sulphur; for which purpose peculiar apartments, with their insides lined with lead, are constructed, in order to enclose the burning sulphur. But because the sulphur would in that situation be soon extinguished, and never burn with due vivacity, about the eighth part of its weight of nitre is mingled with it to supply vital air, without which no combustion can exist. Both the water at the bottom of the chamber, and also the aqueous vapours conveyed into it, imbibe the sulphuric acid as it forms. The weak or dilute acid thus obtained is collected and concentrated by evaporating the superfluous water in glass vessels. Sulphuric acid, concentrated in this manner, is sold under the name of *English oil of vitriol, oleum vitrioli,* to distinguish it from another species, called *Saxon oil of vitriol,* which is obtained from green vitriol by distillation. Every kind of concentrated sulphuric acid, formerly found in commerce, was prepared by distillation from green vitriol, or copperas; and it is on this account that the sulphuric acid is generally called *vitriolic acid.* Oil of vitriol is a very strong acid, burns and corrodes the skin. When pure, it has neither colour nor smell, but is very apt to turn more or less brown, and of a sulphureous odour, by combustible, animal, and vegetable matter, as is usually the case with what is sold in the shops. If sulphuric acid be highly concentrated, it congeals at a temperature of 48°, and becomes a crystalline mass, formerly termed glacial oil of vitriol. Mixed with water it becomes hot, and is then termed spirit of vitriol. Sulphuric acid is a powerful antiseptic and tonic: it is given, properly diluted, in the dose of from one to three drops with cinchona and other medicines in the cure of fevers and debilities, and it is often applied externally, when very much diluted, against psora and some chronic affections of the skin.

Su'lphuris flo'res. See *Sulphur sublimatum.*

SULPHUROUS ACID GAS. Several philosophers have paid attention to the properties of this gas and its combinations; but Berthollet was the first who published an accurate account of it, which Fourcroy and Vauquelin, have investigated still more completely. Their paper is inserted in the *Annales de Chimie,* II. 54. and copied into *Nicholson's Journal, vol.* I. *p.* 313.

When sulphur is united to oxygen it forms an acid. When the quantity of oxygen is sufficient to oxygenate a given quantity of sulphur completely, the result is a perfect acid called sulphuric acid. If a less quantity of oxygen is made use of, the result is an imperfect acid, capable of taking the gaseous state. To this gaseous fluid the name of sulphurous acid gas is given. It becomes obvious from this, that sulphurous acid gas has the same relation to sulphuric acid as phosphorous acid has to the phosphoric acid. At least this gas occupies the middle place between sulphur and sulphuric acid.

Properties. — Sulphurous acid gas is a permanently elastic aëriform fluid at the ordinary pressure and temperature of our atmosphere. Its odour is strong and suffocating. It cannot maintain combustion, nor the respiration of animals. Its weight is more than double that of atmospheric air. Its specific gravity according to Bergman is 0.00246, and 0.00251, according to Lavoisier. It is not inflammable. One hundred cubic inches of it weigh nearly 63 grains. It is composed, according to Fourcroy, of 85 sulphur and 15 oxygen, but subsequent experiments have made the proportions equal. It is acid; it first reddens and then destroys the greater part of the vegetable colours. It exerts little action on the metals, and has a weak attraction to alkalis and earths. It has the property of whitening silk and giving it a lustre. Priestley, Bergman, Berthollet, &c. say that at high temperatures it deposits sulphur, but Fourcroy and Vauquelin, in consequence of some new experiments, deny this assertion. Phosphorus has no action upon it. Its attraction for oxygen when dry, at the common temperature, is very feeble, but, if the smallest quantity of moisture be present, the union of the two gases is much favoured. At high temperatures the combination is more speedily effected. When a mixture of sulphurous acid gas and oxygen gas is made to pass through an ignited tube, the two gases combine and sulphuric acid is formed. When this gas is passed into water cooled down to the freezing point, the union is very rapid. Water cooled to forty degrees absorbs one-third part of its weight of sulphurous acid gas. It speedily melts ice. Water saturated with it may be frozen without parting with its gas; but when water, which has been saturated with it is exposed to heat, it is filled with a vast number of bubbles which continually increase and rise to the surface; these bubbles are the gas separating from it. It is absorbed by oil, ether, and sulphuric acid, the latter when saturated with it acquires the property of smoaking when exposed to air; its colour is altered to a yellowish-brown, and its odour is penetrating like that of the gas. When the acid thus saturated with the gas, is exposed a few degrees below the freezing point, it congeals or freezes into a crystalline mass. The same happens when submitted to distillation. It decomposes nitric and oxymuriatic acid, and dissolves camphor. Sulphurous acid gas and hydrogen gas have no action upon each other at common temperatures, but if they are passed through an ignited tube, a decomposition is effected. Charcoal likewise decomposes sulphurous acid gas at a high temperature. Monge and Clouet affirm that by extreme artificial cold and a strong pressure exerted at the same time, they rendered sulphurous acid gas fluid.

Methods of obtaining Sulphurous Acid Gas. — 1. Take one part of mercury and four of concentrated sulphuric acid; put them into a glass retort connected with the pneumatic quicksilver-trough, and apply the heat of a lamp to the mixture till it boils. On continuing the heat, as the mercury is acted upon, sulphurous acid gas will be obtained in abundance.

In this case a partial decomposition of the sulphuric acid takes place. The mercury abstracts part of its oxygen and becomes converted into an oxyde; the sulphuric acid in consequence of the loss of oxygen, becomes converted into sulphurous acid, which takes the gaseous form at the common temperature.

2. Sulphurous acid gas may likewise be obtained by the slow combustion of sulphur in a close vessel.

Explanation. — During the burning of the sulphur in a confined quantity of atmospheric air, it combines with the oxygen contained in it; this, however, not being sufficient to oxygenate the sulphur completely, the result is an imperfect aëriform acid, or sulphurous acid gas, which remains mixed with the azote.

3. Sulphuous acid gas may also be obtained by decomposing sulphite of potash or soda, either by heat alone, or by the affusion of acids.

4. If charcoal be moistened with sulphuric acid, and then exposed to distillation, the products are carbonic acid gas and sulphurous acid gas.

During this operation the charcoal attracts part of the oxygen of the sulphuric acid, and forms carbonic acid gas. The sulphuric acid is therefore partly de-oxidated and becomes converted into sulphurous acid gas.

5. Sulphurous acid gas is likewise formed by distilling sulphur with the oxides of mercury, lead, tin, manganese, &c.

In these processes the sulphur attracts the oxygen of the metallic oxides, and becomes converted into sulphurous acid gas, while the oxydes are partially restored to the metallic state.

Water impregnated with sulphurous acid gas forms

SULPHUROUS ACID.

1. To prepare sulphurous acid take one part of mercury and four of concentrated sulphuric acid, put them into a retort furnished with a receiver, and connected with Burkitt's or Pepys's apparatus. The sulphurous acid gas which is disengaged is absorbed by the water in the vessel, and constitutes sulphurous acid.

2. Sulphurous acid is likewise formed during the slow combustion of sulphur, when water is present.

The salts formed by the combination of sulphurous acid with different bases, are called sulphites.

Sulphur, washed. See *Sulphur lotum.*

Sulphur, precipitated. See *Sulphur præcipitatum.*

Sultan flower. The *Centaurea moschata*, of Linnæus.

SUMACH. (*Sumak*, from *samak*, to be red; so called from its red berry.) See *Rhus coriaria.*

Sumach, elm-leaved. See *Rhus coriaria.*

SU'MEN. (Arab.) The lower or fat part of the belly.

Sun-dew. See *Drosera rotundifolia.*

SUPERACE'TAS PLU'MBI. Superacetate of lead. See *Plumbi superacetas.*

SUPERARSE'NIAS POTA'SSÆ. Superarseniate of potash. A compound of potash with excess of arsenic acid. It was called *Macquer's Arsenical Salt*, from its discoverer; and has been sometimes given in medicine, possessing similar properties to those of the white oxyde of arsenic.

SUPE'RBUS. See *Rectus superior oculi.*

SUPERCI'LIUM. See *Eyebrow.*

SUPERCI'LIUM VE'NERIS. The milfoil or yarrow was once so termed. See *Achillea millefolium.*

SUPERFŒTATION. (*Superfœtatio*, from *super*, above or upon, and *fœtus*, a fœtus.) The impregnation of a woman already pregnant.

SUPERGEMINA'LIS. (From *super*, above, and *gemini*, the testicles.) The epididymis, or body above the testicles.

SUPERGENUA'LIS. (From *super*, above, and *genu*, the knee.) The patella, or kneepan.

SUPERIMPREGNA'TIO. (From *super*, above, and *impregnatio*, a conception.) Superfœtation.

SUPE'RIOR AU'RIS. See *Attollens aurem.*

SUPERLI'GULA. (From *super*, above, and *ligula*, a little tongue, the glottis.) The epiglottis.

SUPERPURGA'TIO. (From *super*, beyond, and *purgo*, to purge.) An excessive evacuation by stool.

SUPERSCAPULA'RIS. (From *super*, upon, and *scapula*, the shoulder-blade.) A muscle seated upon the scapula.

SUPINATION. (*Supinatio*, from *supinus*, placed upward.) The act of turning the palm of the hand upwards, by rotating the radius upon the ulna.

SUPINA'TOR. (From *supinus*, upwards.) A name given to those muscles which turn the hand upwards.

SUPINA'TOR BRE'VIS. See *Supinator radii brevis.*

SUPINA'TOR LO'NGUS. See *Supinator radii longus.*

SUPINA'TOR RA'DII BRE'VIS. *Supinator brevis, sive minor*, of Winslow, and *epicondylo-radial*, of Dumas. This small muscle, which is tendinous externally, is situated at the upper part of the fore-arm under the supinator longus, the extensor carpi radialis brevis, the extensor carpi ulnaris, the extensor digitorum communis, and the extensor minimi digiti.

It arises tendinous from the lower and anterior part of the outer condyle of the os humeri, and tendinous and fleshy from the outer edge and posterior surface of the ulna, adhering firmly to the ligament that joins the radius to that bone. From these origins its fibres descend forwards and inwards, and are inserted into the upper, inner, and anterior part of the radius around the cartilaginous surface, upon which slides the tendon of the biceps, and likewise into a ridge that runs downwards and outwards below this surface.

This muscle assists in the supination of the hand by rolling the radius outwards.

SUPINA'TOR RA'DII LO'NGUS. *Supinator longus*, of Albinus. *Supinator longus sive major*, of Winslow, and *humerosus radial*, of Dumas. A long flat muscle, covered by a very thin tendinous fascia, and situated immediately under the integuments along the outer convex surface of the radius. It arises, by very short tendinous fibres, from the anterior surface and outer ridge of the os humeri, about two or three inches above its external condyle, between the brachialis internus and the triceps brachii; and likewise from the anterior surface of the external intermuscular membrane, or ligament, as it is called. About the middle of the radius, its fleshy fibres terminate in a flat tendon, which is inserted into the inner side of the inferior extremity of the radius, near the root of its styloid process.

This muscle not only assists in rolling the radius outwards, and turning the palm of the hand upwards, on which account Riolanus first gave it the name of *supinator*, but it likewise assists in pronation, and in bending the fore-arm.

SUPPOSITO′RIUM. (From *sub*, under, and *pono*, to put.) A suppository, *i. e.* a substance to put into the rectum, there to remain and dissolve gradually.

Suppressed menses. See *Amenorrhœa.*

SUPPURATION. (*Suppuratio*, from *suppuro*, to suppurate.) That morbid action by which pus is deposited in inflammatory tumours. See *Pus.*

Supra costa′les. A portion of the intercostal muscles. See *Intercostal muscles.*

SUPRA SPINA′TUS. (*Musculus supra-spinatus.*) *Supra spinatus seu superscapularis*, of Cowper, and *sous-spino-scapulo-trochiterien*, of Dumas. This muscle, which was first so named by Riolanus, from its situation, is of considerable thickness, wider behind than before, and fills the whole of the cavity or fossa that is above the spine of the scapula. It arises fleshy from the whole of the base of the scapula that is above its spine, and likewise from the spine itself, and from the superior costa. Opposite to the basis of the coracoid process, it is found beginning to degenerate into a tendon, which is at first covered by fleshy fibres, and then passing under the acromion, adheres to the capsular ligament of the os humeri, and is inserted into the upper part of the large tuberosity at the head of the os humeri. This muscle is covered by a thin fascia, which adheres to the upper edge and superior part of the basis, as well as to the upper edge of the spine of the scapula. The principal use of the supra spinatus seems to be to assist in raising the arm upwards; at the same time, by drawing the capsular ligament upwards, it prevents it from being pinched between the head of the os humeri and that of the scapula. It may likewise serve to move the scapula upon the humerus.

SURA. (Arab.) The calf of the leg; the fibula.

SURFEIT. The consequence of excess in eating or drinking, or of something unwholesome or improper in these articles. It consists in a heavy load or oppression of the stomach, with nausea, sickness, impeded perspiration, and at times eruptions on the skin.

SURGERY. (*Chirurgia*, from χειρ, the hand, and εργον, labour.) A branch of the science of medicine, having for its object the cure of external diseases.

Sus scro′fa. The systematic name of the hog, which affords lard.

Suspended animation. See *Resuscitation.*

SUSPENSO′RIUM. (From *suspendeo*, to hang.) A suspensory; a bag, or bandage, to suspend the scrotum.

Suspenso′rium he′patis. The broad ligament of the liver.

Suspenso′rius te′stis. The cremaster muscle of the testicle.

Susu′rrus. (From *susurro*, to murmur.) An imaginary sound in the ear.

SUTURE. (*Sutura*, from *suo*, to join together.) Called also *clavata commissura.*

1. In surgery this term signifies the uniting the lips of a wound by sewing. A number of different kinds of sutures have been recommended by writers on surgery, but all of them are now reduced to two: namely, *the twisted*, and the *interrupted*, called also the *knotted suture.* The twisted suture is made in the following manner: having brought the divided parts nearly into contact, a pin is to be introduced from the outside inwards, and carried out through the opposite side to the same distance from the edge that it entered at on the former side; a firm wax ligature is then to be passed around it, making the figure of 8, by which the wounded parts are drawn gently into contact. The number of pins is to be determined by the extent of the wound; half an inch, or at most three quarters, is the proper distance between two pins. The interrupted suture is practised where a number of stitches is required, and the interruption is only the distance between the stitches.

2. In anatomy the word suture is applied to the union of bones by means of dentiform margins, as in the bones of the cranium. See *Temporal, sphenoidal, zygomatic, transverse, coronal, lambdoidal,* and *sagittal sutures.*

Swallow-wort. See *Asclepias vincetoxicum.*

SWAMMERDAM, John, was born at Amsterdam in 1637, and displayed an early predilection for natural history, particularly entomology. At Leyden, where he studied physic, he was distinguished by his skill and assiduity in anatomical experiments and the art of making preparations; and on taking his degree there in 1667, he published a thesis on Respiration. At this time he began to practise his invention of injecting the vessels with ceraceous matter, from which anatomy has derived very important advantages. In the dissection of insects he was singularly dexterous by the aid of instruments of his own invention. The Grand Duke of Tuscany invited him about this period to Florence on very liberal terms, but he declined the offer from aversion to a court-life, and to any religious restraints. In 1669 he published in his native language "A General History of Insects," afterwards reprinted and translated into French and Latin, the latter with splendid figures. In 1672 another work appeared, entitled "Miraculum Naturæ," detailing the Structure of the Uterus; of which there were many subsequent editions. By intense application he became hypochondriacal and infatuated with mysticism, so as to abandon all his scientific pursuits; and his constitution was worn out by his mortifications, so that he died in 1680. Several of his papers, which came long after into the hands of Boerhaave, were published under the title of "Biblia Naturæ;" in which the history of bees is particularly esteemed.

Sweat. See *Perspiration.*

Sweating, immense. See *Ephidrosis.*

Sweet marjoram. See *Origanum majorana.*

Sweet navew. See *Brassica rapa.*

Sweet rush. See *Andropogon scænanthus.*

Sweet sultan. The *Centaurea moschata,* of Linnæus.

Sweet willow. See *Myrica gale.*

SWIETEN, Gerard Van, was born at Leyden in 1700. From the loss of both his parents, his early education is said to have been somewhat neglected: but being sent at sixteen to the university of Louvain, he soon distinguished himself by his superior attainments. He then returned to his native place, and became a favourite pupil of the illustrious Boerhaave; and after studying seven years took the degree of doctor in 1725: and so much had he profited by the instructions of that great master, as well as by his own unwearied researches, that he was immediately appointed to a medical professorship, which he occupied for many years with great reputation. At length, however, his success excited envy, and there being a law, which prohibited those not professing the religion of the State from holding any public appointment, Van Swieten, being a Roman Catholic, was obliged to resign his chair. He devoted the leisure thus acquired to the composition of his excellent commentaries on the Aphorisms of Boerhaave: and while engaged in this work, he was invited by the Empress Maria Theresa to settle at Vienna, which he accepted in the year 1745, after stipulating, that he should be allowed to follow his usual mode of life, which was not well adapted for a court. The intellectual and moral endowments of this physician qualified him in every respect for conducting the medical school at Vienna; and that science in Germany was ultimately essentially benefited by his exertions. He executed, during eight years, the office of professor with singular zeal, and having obtained the full confidence of his royal mistress, he was enabled to reform many abuses, and procure great advantages for the study of medicine in that city. His extensive erudition gained him the farther honour of being entrusted with the interests of learning in general in the Austrian dominions; he was appointed Imperial Librarian, President of the Censorship of Books, &c.; and also created a Baron of the Empire. He was likewise voluntarily enrolled in the list of almost all the distinguished literary societies of Europe. The inflexibility of his character led him to maintain a long opposition to small-pox inoculation. He died in 1772, and a statue was erected to his memory by the Empress at Vienna. His commentaries will always maintain their reputation, from the immense number of facts, well selected and well arranged, and the judicious summary of antient and modern medical knowledge, which they contain. He also published another useful work on the Diseases which prevail in Armies.

SWIETE'NIA. (Named after Van Swieten.) The name of a genus of plants. Class, *Decandria.* Order, *Monogynia.*

Swiete'nia maha'goni. The systematic name of the mahogany tree. The bark of the wood of this tree is of a red colour internally; has an astringent bitter taste; and yields its active matter to water. It has been prepared as a substitute for Peruvian bark, and has been used as such with advantage. Dose half a drachm.

Swine-pox. See *Varicella.*

Syco'ma. (From συκη, a fig.) A wart or excrescence resembling a fig.

Syco'sis. The ophthalmia trachoma of Sauvages; also a fungous ulcer; and according to others the tumour on the anus called marisca.

SYDENHAM, Thomas, was born at Winford-Eagle, in Dorsetshire, about the year 1624. He was entered at Oxford; but during the civil war, when that city was occupied by the royal party, he retired to London. On this occasion, the illness of his brother brought him acquainted with Dr. Coxe, an eminent physician, who, finding Sydenham undecided as to the choice of his profession, persuaded him to study medicine on his return to Oxford. Accordingly, in 1648, he took the degree of bachelor of physic, and about the same period obtained a fellowship; then pursuing his studies a few years longer, he procured a doctor's degree from Cambridge, and settled as a physician in Westminster. The extensive practice, which he is said to have enjoyed from 1660 to 1670, must be chiefly ascribed to the superior success of the means employed by him, which, being so different from those previously in use, became more readily a matter of notoriety; for after the restoration, his connections could have contributed little to his advancement. He appears to have paid little attention to the prevailing medical doctrines, being early persuaded that the only mode of acquiring a correct knowledge of his art was to observe diligently the progress of diseases, whence the natural indications of cure might be derived; in which opinion he had the sanction of the celebrated Mr. Locke. It was to febrile diseases that he first applied this inductive method, and it cost him several years of anxious attention to satisfy himself as to the proper mode of treating them: the result of which he published in 1666, under the title of "Methodus curandi Febres," and again, nine years after, with additional remarks, suggested by subsequent experience. His writings are not altogether free from hypothesis; but he seems to have been little influenced by these in his practice; and by closely observing the operations of nature, and the effects of remedies, he was enabled to introduce very essential improvements. In small-pox especially, by checking the eruptive fever by means of cool air, and other antiphlogistic means, he ascertained that the eruption and consequent danger were greatly diminished: which plan applies likewise to other eruptive and febrile diseases, as has been since determined by general experience. His sagacity was also manifested in the correct histories, which he has left, of some diseases, as particularly small-pox, measles, gout, and hysteria. He was likewise very attentive to the varieties occurring, especially in febrile disorders at different seasons, or in different years; and was led to suppose these connected with a particular constitution of the air. He had been subject, for above thirty years, to gout, and stone in the kidney, which impaired his constitution, and at last terminated his life, in 1689. After his death, a manual of practice, composed for his son, was published under the title of "Processus Integri in Morbis fere omnibus curandis." Sydenham ever maintained the character of a generous and public spirited man; he conducted himself without that arrogance which too often accompanies original talent; and he has been universally acknowledged the first physician of his age. The numerous editions of his works, both singly and collectively, in almost every country of Europe, the deference paid to his authority, and the commendations bestowed upon him by almost all practical writers since, amply prove the solidity of his title to the high reputation attached to his name. The college of physicians, though he was only late in life admitted a licentiate, have subsequently placed his bust in their hall, near that of Harvey.

Sy′lphium. Asafœtida is so termed by some writers. See *Ferula asafœtida*.

SY′LVIUS, Francis De le Boe, was born at Hanau, in 1614. He took his degree at Basle, and then visited, for improvement, some of the chief universities in France and Germany. He settled first at his native place, but removed to Amsterdam, where he enjoyed a high reputation for several years, till he was called to Leyden, in 1658, to assume the office of first professor of medicine. He soon drew together, by his genius and eloquence, a numerous audience from all parts of Europe. He was one of the earliest advocates for Harvey's doctrine of the circulation of the blood, and chiefly effected its reception into that school. But, on the other hand, he materially retarded the progress of medicine by a fanciful hypothesis, which attracted much notice, referring all diseases to chemical changes, producing an excess of acid, or of alkali. His works were chiefly controversial tracts, in which he defended his peculiar notions. He died in 1672.

Sy′lvius, James Du Bois, was born at Amiens in 1478. Having chosen the profession of physic, he studied diligently the writings of the antients, especially Hippocrates and Galen; and was no less assiduous in the pursuit of other branches of medicine, particularly anatomy, pharmacy, and botany. Before taking a degree, he undertook a private course of lectures at Paris, in which he so distinguished himself, that in two years he collected a crowd of pupils from various parts of Europe; but the jealousy of the Parisian physicians obliged him to go to Montpellier, in 1520, for the purpose of graduation. His extreme parsimony, however, would not permit the necessary expences; and he was at last successful in compromising his differences with the Parisian faculty. He subsequently continued his lectures with very great success, and in 1550 he was appointed professor of medicine at the royal college; but his death occurred five years afterwards. His works were popular during the reign of the old school, but are now obsolete. As an anatomist, he merits great praise, having made various discoveries, notwithstanding the few opportunities he had of human dissection. He wrote with great violence against Vesalius, his pupil, because he had presumed to correct Galen.

SYMBLE′PHARUM. (From συν, with, and βλεφαρον, the eye-lid.) A concretion of the eye-lid to the globe of the eye. This chiefly happens in the superior, but very rarely in the inferior palpebra. The causes of this concretion are a bad conformation of the parts, or from ulcers of the cornea, the membrana conjunctiva, or internal superficies of the palpebræ, or imprudent scarifications, or burns, especially if the eye remains long closed. There are two species, the partial, or total; in the former the adhesion is partial, in the latter, the membrana conjunctiva and cornea are concreted to the eye-lid together.

Sy′mbole. (From συμϐαλλω, to knit together.) Is said either of the fitness of parts with one another, or of the consent between them by the intermediation of nerves, and the like.

Symbolo′gia. (From συμϐολον, a sign, and λογος, a discourse.) The doctrine of the signs and symptoms of disease.

Symmetry. The exact and beautiful proportion of parts to one another.

Sympathetic nerve. See *Intercostal nerve.*

SYMPATHY, (From συμπασχω, to suffer together, to sympathise.) *Sympathia.* All the body is sympathetically connected together, and dependent, the one part upon the rest, constituting a general sympathy. But sometimes we find particular parts more intimately dependent upon each other than upon the rest of the body, constituting a particular sympathy. Action cannot be greatly increased in any one organ, without being diminished in some other; but certain parts are more apt to be affected by the derangement of particular organs than others; and it was the observance of this fact which gave foundation to the old and well-known doctrine of sympathy, which was said to proceed, "*tum ob communionem et similitudinem generis, tum ob viciniam.*" It may be thought that this position of action being diminished in one organ, by its increase, either in the rest or in some other part, is contradicted by the existence of general diseases or actions affecting the whole system. But in them we find, in the first place, that there is always some part more affected than the rest. This local affection is sometimes the first symptom, and affects the constitution in a secondary way, either by the irritation which it produces, or by an extension of the specific action. At other times the local affection is coeval with the general disease, and is called sympathetic. It is observed, in the second place, that as there is some part which is always more affected than the rest, so also is there some organ which has its action, in consequence of this, diminished lower than that of the rest of the system, and most commonly lower than its natural standard. From the extensive sympathy of the stomach with almost every part of the body, we find that this most frequently suffers, and has its action diminished in every disease, whether general or local, provided that the diseased action arises to any considerable degree. There are also other organs which may, in like manner, suffer from their association or connection with others which become diseased. Thus, for instance, we see, in the general disease called puerperal fever, that the action of the breasts is diminished by the increased inflammatory action of the uterus.

In consequence of this balance of action, or general connection of the system, a sudden pain, consequent to violent action of any particular part will so weaken the rest as to produce fainting, and occasionally death. But this dependence appears more evidently in what may be called the smaller systems of the body, or those parts which seem to be more intimately connected with each other than they are with the general system. Of this kind is the connection of the breasts with the uterus of the female; of the urethra with the testicles of the male; of the stomach with the liver; and of the intestines with the stomach, and of this again with the brain; of the one extremity of the bone with the other; and of the body of the muscle with its insertion; of the skin with the parts below it.

These smaller systems, or circles, shall be treated regularly; but first it may be proper to observe, that these are not only intimately connected with themselves, but also with the general system, an universal sympathy being thus established.

That there is a very intimate connection between the breasts and uterus has been long known; but it has not been very satisfactorily explained. Fallopius, and all the older authors, declare plainly that the sympathy is produced by an anastomosis of vessels; Bartholin adding that the child being born, the blood no longer goes to the uterus, but is directed to the breasts and changed into milk. But none of all those who talk of this derivation, assign any reasonable cause which may produce it.

In pregnancy, and at the menstrual periods, the uterus is active; but, when the child is delivered, the action of the uterus subsides, whilst the breasts in their turn become active, and secrete milk.

If, at this time, we should again produce action in the uterus, we diminish that of the breasts, and destroy the secretion of milk, as is well illustrated by the case of inflammation of the uterus, which is incident to lying-in women. When the uterus, at the cessation of the menses, ceases to be active, or to secrete, we often find that the breasts have an action excited in them, becoming slowly inflamed, and assuming a cancerous disposition. The uterus and breasts seem to be a set of glands balancing each other in the system, one only being naturally active, or secreting properly, at a time; and accordingly we seldom, if ever, find that when the uterus yields the menstrual discharge, the milk is secreted in perfection, during the continuance of this discharge, nor do we ever find them both inflamed at the same time.

The uterus has not only this connection with the breasts, but it has also a very particular sympathy with the stomach, which again sympathises with the brain; and thus we see how a disorder of the uterus may induce an extensive series of affections, each dependent on the other.

The organs of generation in the male form likewise a little system, in which all the parts exhibit this sympathy with each other. They likewise give us a very good instance of the association of action, or sympathy in the common acceptation of that word.

Sympathy is divided into, first, the sympathy of equilibrium, in which one part is weakened by the increased action of another; and, secondly, the sympathy of association, in which two parts act together at the same time.

The sympathy of association is produced suddenly, and for a short time. The sympathy of equilibrium is produced more slowly, and continues to operate for a much longer time.

It is curious enough that most, or at least many, of those organs, which seem to be connected by the sympathy of equilibrium, exhibit likewise more or less of the sympathy of association, when under the circumstances in which this can take place.

The sympathy of equilibrium is seen in the effects of inflammation of the end of the urethra on the testicle; which often diminishes its action, and produces a very disagreeable sensation of dullness, or, if this inflammation be suddenly diminished, the action of the testicle is as suddenly increased, and swelling takes place. The same is seen in the connection of the urethra with the bladder and prostate gland, as is mentioned in all the dissertations on gonorrhœa. These parts likewise affect the stomach greatly, increased action in them weakening that organ much. This is seen in the effects of swelled testicle, or excessive venery, or inflamed bladder, and in a stone; all which weaken the stomach, and produce dyspepsia. The same remark applies to the kidney; vomiting and flatulence being produced by nephritis.

The sympathy of association, or an instance of sympathy in the common acceptation of the word, is likewise seen in the connection betwixt the glans and testicles in coition; but for this purpose, the action in the glans must be sudden and of short duration; for, if continued long, weakness of the testicles, or diminished action, is induced. In those parts which exhibit this natural association of action, if the action of one part be suddenly and for a short time increased, the action of the sympathising part will likewise be increased; as we see in the instance already given of coition, and likewise in paroxysms of the stone, in which the glans penis, after making water, becomes very painful.

But if the action be more slowly induced, and continued for a long time, then this association is set aside, by the stronger and more general principle of the equilibrium of action, and the sympathising part is weakened. Hence violent inflammation of the end of the urethra produces a weakness and irritability of the bladder, dullness of the testicle, &c.

There is also an evident sympathy of equilibrium betwixt the stomach and lower tract of intestines; which two portions may be said in general to balance each other in the abdomen. When the action of the intestines is increased in diarrhœa, the stomach is often weakened, and the patient tormented with nausea. This will be cured, not so easily by medicines taken into the stomach, as by anodyne clysters, which will abate the action of the intestines. When the intestines are inflamed, as in strangulated hernia, vomiting is a never-failing attendant.

When again the stomach is inflamed, the intestines are affected, and obstinate costiveness takes place; even in hysterical affections of the stomach, the intestines are often deranged. Injections of cold water frequently relieve these affections of the stomach, by their action on the intestines.

The liver and stomach are also connected with one another. When the liver is inflamed, or has its action increased, the stomach is weakened, and dyspeptic symptoms take place. When the stomach is weakened, as, for instance, by intoxication, then the action of the liver is increased, and a greater quantity than usual of bile is secreted. The same takes place in warm climates, where the stomach is much debilitated.

If the liver has its action thus frequently increased, it assumes a species of inflammation, or becomes, as it is called, scirrhous. This is exemplified in the habitual dram-drinkers, and in those who stay long in warm countries and use freedoms with the stomach. The liver likewise sympathises with the brain; for when this organ is injured, and its action much impaired, as in compression, inflammation and suppuration have been often known to take place in the liver.

Besides this connection of the stomach with the liver, it is also very intimately dependent on the brain, being weakened when the action of the brain is increased; as we see in an inflammation of that organ. The brain again is affected with pain when the stomach is weakened by intoxication, or other causes; and this pain will be often relieved by slowly renewing the action of the stomach, by such stimuli as are natural to it, such as small quantities of soup frequently repeated. A slight increase of action in the stomach, at least if not of a morbid kind, affects the brain so as to produce sleep, diminishing its action. This we see in the effects of a full meal, and even of a draught of warm water. The stomach likewise sympathizes with the throat, sqeamishness and anorexia being often produced by inflammation of the tonsils. This inflammation is frequently abated by restoring or increasing the action of the stomach. Hence the throat, in slight inflammation, is frequently easier after dinner; hence, likewise, the effects of emetics in cynanche.

The extremities of bones and muscles also sympathize in the same manner. When one end of a bone is inflamed, the action of the other is lessened, and pain is produced; for a painful sensation may result both from increased and diminished action. When the tendon of a muscle is inflamed, the body of that muscle often is pained, and *vice versa*.

Lastly, the external skin sympathizes with the parts below it. If it be inflamed, as in erysipelas, the parts immediately beneath are weakened, or have their natural action diminished. If this inflammation affect the face, or scalp, then the brain is injured; and head-ache, stupor, or delirium, supervene. If it attack the skin of the abdomen, then the abdominal viscera are affected, and we have vomiting and purging, or obstinate costiveness, according to circumstances. This is illustrated by the disease of children, which is called by the women the bowel-hive, in which the skin is inflamed, as they suppose, from some morbid matter within.

If the internal parts be inflamed, the action of the surface is diminished, and, by increasing this action, we can lessen or remove the disease below; as we see daily proved by the good effects of blisters. When the stomach, intestines, or kidney, have been very irritable, a sinapism has been known to act like a charm; and, in the deep-seated inflammations of the breasts, bowels, or joints, no better remedy is known, after the use of the lancet, than blisters.

The utility of issues in diseases of the lungs, the liver, and the joints, is to be explained on the same principle. In these cases we find that issues do little good unless they be somewhat painful, or be in the state of healthy ulcers. An indolent flabby sore, however large the discharge, (which is always thin, and accompanied with little action,) does no good, but only adds to the misery of the patient. We may, however, err on the other hand by making the issues too painful, or by keeping them active too long, for, after they have removed the inflammatory disease below, they will still operate on these parts, lessening their action, and preventing the healing process from going on properly. This is seen in cases of curvature of the spine, where at first the inflammation of the vertebra is diminished by the issues; but if they be kept long open after this is removed, they do harm. We often see the patient recover rapidly after his surgeon has healed the issue in despair, judging that it could do no farther service, but only increase the weakness of his patient.

It is a well-established fact, that when any particular action disappears suddenly from a part, it will often speedily affect that organ which sympathizes most with the part that was originally diseased. This is best seen in the inflammatory action, which, as practical writers have well observed, occasionally disappears quickly from the part first affected, and then shows itself in some other.

From the united testimony of all these facts, Mr. Burns, of Glasgow, maintains the doctrine just delivered, and proposes to introduce it into pathological reasonings. In the whole of the animal economy, we discover marks of the wisdom of the Creator, but perhaps in no part of it more than in this, of the existence of the sympathy of equilibrium, for if a large part of the system were to have its action much increased, and all the other parts to continue acting in the same proportionate degree as formerly, the whole must be soon exhausted; (for increased action would require for its support an increased quantity of energy).

But upon this principle, when action is much increased in one part, it is to a certain degree diminished in some other, the general sum or degree of action in the body is thus less than it otherwise would be, and consequently the system suffers less.

SY'MPHYSIS. (From συν, together, and φυω, to grow.) Mediate connection. A genus of the connection of bones, in which they are united by means of an intervening body. It comprehends four species, viz. synchondrosis, syssarcosis, syneurosis, and syndesmosis.

SY'MPHYTUM. (From συμφυω, to unite; so called because it is supposed to unite and close the lips of wounds together.) 1. The name of a genus of plants in the Linnæan system, Class, *Pentandria*, Order, *Monogynia*.

2. The pharmacopœial name of the comfrey. See *Symphytum officinale*.

Sy'mphytum maculo'sum. See *Pulmonaria officinalis*.

Sy'mphytum mi'nus. See *Prunella*.

Sy'mphytum officina'le. The systematic name of the comfrey. *Consolida major*. This plant, *Symphytum:—foliis-ovatis lanceolatis decurrentibus*, is administered where the althæa cannot be obtained, its roots abounding with a viscid glutinous juice, whose virtues are similar to those of the *althæa.*

Syna'nche. See *Cynanche.*

Syna'nchica. (From συναγχη, the quinsey; so called from its uses in that disease.) Quinsey-wort.

SYNARTHRO'SIS. (From συν, together and αρθρον, a joint.) Immoveable connection. A genus of connection of bones, in which they are united together by an immoveable union. It has three species, viz. suture, harmony, and gomphosis.

Synastomo'sis. This is used in the same sense as *Anastomosis.*

SYNCHONDRO'SIS. (From συν, with, and χονδρος, a cartilage.) A species of symphysis, in which one bone is united with another by means of an intervening cartilage, as the vertebræ and the bones of the pubes.

Synchondroto'mia. (From συγχονδρωσις, the symphysis of the pubes, and τεμνω, to cut.) The operation of dividing the symphysis of the pubes.

SY'NCHYSIS. (From συγχυω, to confound.) A solution of the vitreous humour into a fine attenuated aqueous fluid. In Cullen's Nosology it is a variety of his species *caligo pupillæ.*

Synci'pitis o'ssa. See *Parietal bones.*

SY'NCIPUT. The forepart of the cranium.

SY'NCOPE. (From συν, with, and κοπτω, to cut, or strike down.) *Animi deliquium. Leipothymia.* Fainting or swooning. A genus of disease in the Class, *Neuroses,* and Order, *Adynamiæ,* of Cullen, in which the respiration and action of the heart either cease, or become much weaker than usual, with paleness and coldness, arising from diminished energy of the brain, or from organic affections of the heart. Species: 1. *Syncope cardiaca,* the cardiac syncope, arising without a visible cause, and with violent palpitation of the heart, during the intervals, and depending generally on some organic affection of the heart or neighbouring vessels.

2. *Syncope occasionalis,* the exciting cause being manifest.

The disease is sometimes preceded by anxiety about the præcordia, a sense of fulness ascending from the stomach towards the head, vertigo, or confusion of ideas, dimness of sight, and coldness of the extremities. The attacks are frequently attended with, or end in vomiting, and sometimes in epileptic or other convulsions. The causes are sudden and violent emotions of the mind, pungent or disagreeable odours, derangement of the primæ viæ, debility from preceding disorders, loss of blood spontaneous or artificial, the operation of paracentesis, &c. During the paroxysm the nostrils are to be stimulated with some of the preparations of ammonia, or these may be exhibited internally, if the patient is capable of swallowing; but when the disease has originated from large loss of blood, such stimulants must be used cautiously. When it is connected with a disordered state of the stomach, if an emetic can be given, or vomiting excited by irritating the fauces, it will probably afford relief. Sometimes sprinkling the face with cold water, will recover the patient. And when there is reason for supposing an accumulation about the heart, the disease not having arisen from debilitating causes, a moderate abstraction of blood may be made with propriety. Between the fits we should endeavour to strengthen the constitution, where debility appears concerned in producing them, and the several exciting causes must be carefully guarded against. When organic affections of the heart, and parts connected with it, exist, all that can be done is, to palliate the attacks of fainting; unless the primary disease can be removed, which is extremely rare.

Sy'ncope angino'sa. See *Angina pectoris.*

SYNDESMOLO'GIA. (From συνδεσμος, a ligament, and λογος, a discourse.) The doctrine of the ligaments.

Syndesmo-pharynge'us. See *Constrictor pharyngis medius.*

SYNDESMO'SIS. (From συνδεσμος, a ligament.) That species of symphysis or mediate connection of bones in which they are united by ligament, as the radius with the ulna.

Synde'smus. (From συνδεω, to bind together.) A ligament.

SYNE'CHIA. Συνεχια. A concretion of the iris with the cornea, or with the capsule of the crystalline lens. The proximate cause is adhesion of these parts, the consequence of inflammation. The remote causes are, a collapse of the cornea, a prolapse of the iris, a swelling or tumified cataract, hypopium, or original formation. The species of this disorder are:

1. *Synechia anterior totalis,* or a concretion of the iris with the cornea. This species is known by inspecting the parts. The pupil in this species is dilated or coarctated, or it is found concreted; from whence various lesions of vision.

2. *Synechia anterior partialis,* when only some part of the iris is accreted. This concretion is observed in one or many places; from hence the pupil is variously disfigured, and an inordinate motion of the pupil is perceived.

3. *Synechia anterior composita,* when not only the whole iris, but also a prolapse of the crystalline lens, unites with the cornea.

4. *Synechia posterior totalis,* or a concretion of the whole uvea, with the ciliary processes and the capsule of the crystalline lens.

5. *Synechia posterior partialis,* when only some part of the capsule of the crystalline lens is concreted with the uvea and cornea,

This accretion is simplex, duplex, triplex, or in many places.

6. *Synechia complicata*, with an amaurosis, cataract, mydriasis, myosis, or synizesis.

SYNEURO'SIS. (From συν, with, and νευρον, a nerve, because the antients included membranes, ligaments, and tendons, under the head of nerves.) A species of symphysis, in which one bone is united to another by means of an intervening membrane.

SYNIZE'SIS. *Considentia.* A perfect concretion and coarctation of the pupil. It is known by the absence of the pupil, and a total loss of vision. The species are:

1. *Synizesis nativa*, with which infants are sometimes born. In this case, by an error of the first conformation of the pupil, there is no perforation; it is very rarely found.

2. *Synizesis accidentalis*, a concretion of the pupil, from an inflammation or exulceration of the uvea or iris, or from a defect of the aqueous or vitreous humour.

3. *Synizesis*, from a secession of the iris or cornea. From whatever cause it may happen, the effect is certain, for the pupil contracts its diameter; the longitudinal fibres, separated from the circle of the cornea, cannot resist the orbicular fibres: from hence the pupil is wholly or partially contracted.

4. *Synizesis complicata*, or that which is complicated with an amaurosis, synechia, or other ocular disease. The amaurosis, or gutta serena, is known by the total absence of light to the retina; we can distinguish this not only by the pupil being closed, but likewise the eyelids, for whether the eyelids be open or shut, all is darkness to the patient. The other complicated cases are known by viewing the eye, and considering the parts anatomically.

5. *Synizesis spuria*, is a closing of the pupil by mucus, pus, or grumous blood.

SY'NOCHA. (From συνεχω, to continue.) Inflammatory fever. A species of continued fever; characterised by increased heat; pulse frequent, strong, hard; urine high-coloured; senses not impaired. This fever is so named from its being attended with symptoms denoting general inflammation in the system, by which we shall always be able readily to distinguish it from either the nervous or putrid. It makes its attack at all seasons of the year, but is most prevalent in the spring; and it seizes persons of all ages and habits, but more particularly those in the vigour of life, with strong elastic fibres, and of a plethoric constitution. It is a species of fever almost peculiar to cold and temperate climates, being rarely, if ever met with in very warm ones, except amongst Europeans lately arrived; and even then, the inflammatory stage is of very short duration, as it very soon assumes either the nervous or putrid type.

The exciting causes are sudden transitions from heat to cold, swallowing cold liquors when the body is much heated by exercise, too free a use of vinous and spirituous liquors, great intemperance, violent passions of the mind, the sudden suppression of habitual evacuations, and the sudden repulsion of eruptions. It may be doubted if this fever ever originates from personal infection; but it is possible for it to appear as an epidemic amongst such as are of a robust habit, from a peculiar state of the atmosphere. It comes on with a sense of lassitude and inactivity, succeeded by vertigo, rigors, and pains over the whole body, but more particularly in the head and back; which symptoms are shortly followed by redness of the face and eyes, great restlessness, intense heat, and unquenchable thirst, oppression of breathing, and nausea. The skin is dry and parched; the tongue is of a scarlet colour at the sides, and furred with white in the centre; the urine is red and scanty; the body is costive; and there is a quickness, with a fullness and hardness in the pulse, not much affected by any pressure made on the artery. If the febrile symptoms run very high, and proper means are not used at an early period, stupor and delirium come on, the imagination becomes much disturbed and hurried, and the patient raves violently. The disease usually goes through its course in about fourteen days, and terminates in a crisis, either by diaphoresis, diarrhœa, hæmorrhage from the nose, or the deposit of a copious sediment in the urine; which crisis is usually preceded by some variation in the pulse.

Our judgment as to the termination of the disease, must be formed from the violence of the attack, and the nature of the symptoms. If the fever runs high, or continues many days with stupor or delirium, the event may be doubtful; but if to these are added, picking at the bed-clothes, startings of the tendons, involuntary discharges by stool and urine, and hiccups, it will then certainly be fatal. On the contrary, if the febrile heat abates the other symptoms moderate, and there is a tendency to a crisis, we may then expect a recovery. In a few instances, this fever has been known to terminate in mania.

On opening those who die of an inflammatory fever, an effusion is often perceived within the cranium, and now and then, topical affections of some of the viscera are to be observed.

The chief indication in synocha is to lessen the excessive vascular action by evacuations, and the antiphlogistic regimen. Of the former, by far the most important, is blood-letting, which should be freely practised in this disease, making a large orifice into the vein, and taking from ten to twenty-four ounces of blood, according to the violence of the symptoms, and the strength of the patient. The disorder may sometimes be cut short at once by this active treatment in the beginning; but if it should continue urgent, and the strength of the pulse keep up, the repetition of it within more moderate limits will be from time to time advisable. Purging is next in efficacy, especially with those articles which produce copious serous discharges, and thoroughly clear out the intestines, as the saline cathartics, with infusion of senna, jalap with supertartrate of potash, &c. As the disease advances, however, we must act less on this part, and attempt to promote the other discharges, particularly that by the skin: for which purpose calomel, antimonials, and the saline diaphoretics are to be exhibited. The antiphlogistic regimen consists in obviating stimuli of every kind, so far as this can be done safely; impressions on the senses, particularly the sight and hearing, bodily and mental exertion, &c. must be guarded against as much as possible. The diet should be of the most sparing kind, barley-water, or other mild liquid, with some acid, perhaps, added, or a little nitrate of potash dissolved in it, taken in small quantities from time to time, chiefly to quench the thirst, and cool the body, will be the most proper, strictly interdicting animal food, fermented liquors, and the like. The stimulus of heat must be especially obviated by light clothing, or even exposing the body to the air, ventilating the apartment, sprinkling the floor with vinegar and water, &c. When the head is much affected, besides the general treatment, it will be proper to take blood locally, have the head shaved and cooled by some evaporating lotion, apply a blister to the neck, and, perhaps, stimulate the lower extremities. In like manner any other organ being particularly pressed upon, may require additional means, which will be sufficiently understood by adverting to the several phlegmasiæ.

SY'NOCHUS. (From συνεχω, to continue.) A mixed fever. A species of continued fever, commencing with symptoms of synocha, and terminating in typhus; so that synocha and typhus, blended together in a slight degree, seem to constitute this species of fever, the former being apt to preponderate at its commencement, and the latter towards its termination.

Every thing which has a tendency to enervate the body, may be looked upon as a remote cause of this fever; and accordingly we find it often arising from great bodily fatigue, too great an indulgence in sensual pleasures, violent exertion, intemperance in drinking, and errors in diet, and now and then likewise from the suppression of some long-accustomed discharge. Certain passions of the mind (such as grief, fear, anxiety, and joy,) have been enumerated amongst the causes of fever, and in a few instances it is probable they may have given rise to it; but the concurrence of some other powers seems generally necessary to produce this effect. The most usual and universal cause of this fever is the application of cold to the body; and its morbid effects seem to depend partly upon certain circumstances of the cold itself, and partly upon certain circumstances of the person to whom it is applied.

The circumstances which seem to give the application of cold due effect, are its degree of intensity, the length of time which it is applied; its being applied generally, or only in a current of air, its having a degree of moisture accompanying it, and its being a considerable or sudden change from heat to cold. The circumstances of persons rendering them more liable to be affected by cold, seem to be debility, induced either by great fatigue, or violent exertions, by long fasting, by the want of natural rest, by severe evacuations, by preceding disease, by errors in diet, by intemperance in drinking, by great sensuality, by too close an application to study, or giving way to grief, fear, or great anxiety, by depriving the body of a part of its accustomed clothing, by exposing any one particular part of it, whilst the rest is kept of its usual warmth, or by exposing it generally or suddenly to cold when heated much beyond its usual temperature; these we may, therefore, look upon as so many causes giving an effect to cold which it otherwise might not have produced. Another frequent cause of fever seems to be breathing air contaminated by the vapours arising either directly or originally from the body of a person labouring under the disease. A peculiar matter is supposed to generate in the body of a person affected with fever, and this floating in the atmosphere, and being applied to one in health, will no doubt often cause fever to take place in him, which has induced many to suppose that this infectious matter is produced in all fevers whatever, and that they are all, more or less, contagious.

The effluvia arising from the human body, if long confined to one place without being diffused in the atmosphere, will, it is well known, acquire a singular virulence, and will, if applied to the bodies of men, become the cause of fever. Exhalations, arising from animal or vegetable substances in a state of putrefaction, have been looked upon as another general cause of fever: marshy or moist grounds, acted upon by heat for any length of time, usually send forth exhalations which prove a never-failing source of fever, but more particularly in warm climates. Various hypotheses have been maintained, with respect to the proximate cause of fever; some supposing it to be a lentor or viscidity prevailing in the mass of blood, and stagnating in the extreme vessels; others, that it is a noxious matter introduced into or generated in the body, and that the increased action of the heart and arteries is an effort of nature to expel the morbific matter; others, that it consisted in an increased secretion of bile; and others again, that it is to be attributed to a spasmodic constriction of the extreme vessels on the surface of the body; which last was the doctrine taught by the late Dr. Cullen.

An attack of this fever is generally marked by the patient's being seized with a considerable degree of languor or sense of debility, together with a sluggishness in motion, and frequent yawning and stretching; the face and extremities at the same time become pale, and the skin over the whole surface of the body appears constricted; he then perceives a sensation of cold in his back, passing from thence over his whole frame, and this sense of cold continuing to increase; tremors in the limbs, and rigors of the body succeed.

With these there is a loss of appetite, want of taste in the mouth, slight pains in the head, back, and loins, small and frequent respirations. The sense of cold and its effects after a little time become less violent, and are alternated with flushings, and at last, going off altogether, they are succeeded by great heat diffused generally over the whole body; the face looks flushed, the skin is dry, as likewise the tongue; universal restlessness prevails, with a violent pain in the head, oppression at the chest, sickness at the stomach, and an inclination to vomit. There is likewise a great thirst and costiveness, and the pulse is full and frequent, beating, perhaps, 90 or 100 strokes in a minute. When the symptoms run very high, and there is a considerable determination of blood to the head, a delirium will arise. In this fever, as well as most others, there is generally an increase of symptoms towards evening.

If the disease is likely to prove fatal, either by its continuing a long time, or by the severity of its symptoms, then a starting of the tendons, picking at the bed-clothes, involuntary discharges by urine and stool, coldness of the extremities, and hiccoughs, will be observed; where no such appearances take place, the disease will go through its course.

As a fever once produced will go on, although its cause be entirely removed, and as the continued or fresh application of a cause of fever neither will increase that which is already produced, nor occasion a new one, there can be no certainty as to the duration of fever, and it is only by attending to certain appearances or changes, which usually take place on the approach of a crisis, that we can form any opinion or decision. The symptoms pointing out the approach of a crisis, are the pulse becoming soft, moderate, and near its natural speed; the tongue losing its fur and becoming clean, with an abatement of thirst; the skin being covered with a gentle moisture, and feeling soft to the touch; the secretory organs performing their several offices; and the urine depositing flaky crystals of a dirty red colour, and becoming turbid on being allowed to stand any time.

Many physicians have been of opinion, that there is something in the nature of all acute diseases, except those of a putrid kind, which usually determines them to be of a certain duration, and, therefore, that these terminations, when salutary, happen at certain periods of the disease rather than at others, unless disturbed in their progress by an improper mode of treatment, or the arising of some accidental circumstance. These periods are known by the appellation of critical days; and from the time of Hippocrates down to the present, have been pretty generally admitted. The truth of them, Dr. Thomas thinks can hardly be disputed, however they may be interrupted by various causes. A great number of phenomena show us, that both in the sound state and the diseased, nature has a tendency to observe certain periods; for instance, the vicissitudes of sleeping and watching occurring with such regularity to every one; the accurate periods that the menstrual flux observes, and the exact time of pregnancy in all viviparous animals, and many other such instances that might be adduced, all prove this law.

With respect to diseases, every one must have observed the definite periods which take place in regular intermittents, as well those universal as topical; in the course of true inflammation, which at the fourth, or at the farthest the seventh day, is resolved, or after this period, changes into either abscess, gangrene, or schirrus; in exanthematous eruptions, which, if they are favourable and regular, appear on a certain and definite day; for example, the small-pox about the fourth day. All these appear to be founded on immutable laws, according to which the motions of the body in health and in disease are governed.

The days on which it is supposed the termination of continued fevers principally happens, are the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, and twentieth.

A simple continued fever terminates always by a regular crisis in the manner before mentioned, or from the febrile matter falling on some particular parts, it excites inflammation, abscess, eruption, or destroys the patient.

Great anxiety, loss of strength, intense heat, stupor, delirium, irregularity in the pulse, twitchings in the fingers and hands, picking at the bed-clothes, startings of the tendons, hiccoughs, involuntary evacuations by urine and stool, and such like symptoms, point out the certain approach of death.

On the contrary, when the senses remain clear and distinct, the febrile heat abates, the skin is soft and moist, the pulse becomes moderate and is regular, and the urine deposits flaky crystals, we may then expect a speedy and happy termination to the disease.

The usual appearances which are to be observed on dissection of those who die of this fever, are an effusion within the cranium, and topical affections perhaps of some viscera.

This disease being of a mixed nature, the treatment must be modified accordingly. In the beginning the same plan is to be pursued, as in synocha, except that we must be more sparing in the use of the lancet, in proportion as there is less power in the system, to maintain the increased action of the heart and arteries; although if any important part should be much affected, we must act more vigorously, to prevent its disorganization, and the consequent destruction of life. When the character of the disease is changed, the means proper will be such as are pointed out under the head of Typhus.

SYNO'VIA. (A term of no radical meaning, coined by Paracelsus.) *Hydarthros. Mucilago.* An unctuous fluid secreted from certain glands in the joint in which it is contained. Its use is to lubricate the cartilaginous surfaces of the articulatory bones, and to facilitate their motions.

Synovial glands. *Glandulæ synoviæ.* The assemblage of a fatty fimbriated structure within the cavities of some joints.

SYNTENO'SIS. (From συν, with, and τενων, a tendon.) A species of articulation where the bones are connected together by tendons.

Synte'xis. (From συντηχω, to dissolve.) A marasmus or colliquative wasting of the body.

SY'NTHESIS. (From συντιθημι, to compose.) Combination. See *Analysis.*

Syntheti'smus. (From συνθεω, to concur.) The reduction of a fracture.

Synulo'tica. (From συνουλοω, to cicatrise.) Medicines which heal wounds.

SY'PHILIS. (The name of a shepherd, who fed the flocks of king Alcithous, who, proud of their number and beauty, insulted the sun; as a punishment for which, fable relates, that this disease was sent on earth; or from σιφλος, filthy.) *Lues venerea. Morbus Gallicus.* A genus of disease in the Class, *Cachexiæ,* and Order, *Impetigines,* of Cullen. Towards the close of the memorable fifteenth century, about the year 1494 or 1495 the inhabitants of Europe were greatly alarmed by the sudden appearance of this disease. The novelty of its symptoms, and the wonderful rapidity with which it was propagated throughout every part of the known world, soon made it an important object of medical inquiry.

In common language, it is said a person has syphilis or is poxed, when the venereal poison has been received into, or is diffused through the system, and there produces its peculiar effects, as ulcers of the mouth or fauces, spots, tetters, and ulcers of the skin, pains, swelling, and caries of the bones, &c. But as long as the effects of the poison are local and confined to or near the genitals, the disorder is not called syphilis, lues venerea, nor pox; but distinguished by some particular name, according to its different seat or appearance; such as gonorrhœa venerea, chancre or bubo.

The venereal disease is always produced by a poison. Concerning the nature of this poison, we know no more than we do about that of the small-pox or any other contagion; we know only that it produces peculiar effects. The smallest particle of this poison is sufficient to bring on the most violent disorder over the whole body. It seems to spread and diffuse itself by a kind of fermentation and assimilation of matter; and, like other contagions, it requires some time after being applied to the human body, before it produces that effect. It is not known whether it has different degrees of acrimony and volatility, or whether it is always the same in its nature, varying only with regard to the particular part to which it is applied, or according to the different habit and constitution or particular idiosyncrasy of the person who receives the infection. We know that mercury possesses a certain and specific power of destroying the venereal virus; but we are quite uncertain whether it acts by a sedative, adstringent, or evacuant quality; or if not, perhaps, rather by a chemical elective attraction whereby both substances uniting with one another are changed to a third, which is no more hurtful, but has some new properties entirely distinct from those which any of them had before they were united. The variolous miasma, we know, produces its effects in about twenty or twenty-four days after the infection is received from the atmosphere, and eight or ten days if by inoculation, but the venereal virus seems to keep no particular period. At some times, and, perhaps, in particular persons, Dr. Swediaur has seen chancres arise in the space of twelve hours, nay, in a still shorter time, indeed he mentions in a few minutes, after an impure coition; whereas in most cases, they make their appearance only in as many days. The generality of men feel the first symptoms of a clap between the second and fifth days after an impure coitus; but there are instances where they do not appear till after as many weeks or months. Dr. S. was consulted by a young man, who was seized with a violent discharge from the glans along with a phimosis, but without any chancres, four weeks after coition; and during all the interval, he felt not the least symptom of the disease. Some years ago, a gentleman went out from London, in seemingly perfect health, to the

East Indies; but on his arrival in that hot climate, after a voyage of four months, a violent clap broke out before he went on shore, though he could have received no infection during the voyage, as there was not a woman on board. There are instances which render it probable that the virus may lie four, five, or six weeks, and perhaps longer, on the surface of the genitals before it is absorbed; and were it not then to produce a chancre, might probably not be absorbed at all. We see daily examples, where common women communicate the infection to different men in the space of several weeks, while they themselves have not the least symptom of syphilis local or universal, the poison lying all that time in the vagina harmless, and generally without being absorbed. How long the venereal virus may lurk in the body itself, after it has been absorbed into the mass of blood, before it produces any sensible effect, is a matter of equal uncertainty. There is scarcely a practitioner who has not observed instances of its remaining harmless for weeks or even months in the body. Dr. Swediaur had a case, where, after lying dormant for half a year, it broke out with unequivocal symptoms. But the following instance, if to be depended upon, is still more extraordinary:

Some years ago, says the above writer, I was consulted by a gentleman about a sore throat, which I declared to be venereal. My patient was astonished; and assured me that for nine years past he had not had the least venereal complaint, nor had he any reason to believe he had since received any infection; but that he had been in the East Indies, where he was affected with a violent clap. On his return to Europe, being to appearance in good health, he married, and continued perfectly free of any such complaint ever since. By a mercurial course, however, the complaint for which he applied to me was completely removed. With regard to its effects, the venereal poison follows no constant rule: for though, in general, it affects first the throat, where it produces ulcerations, in others it exerts its virulence on the skin or bones. Whilst the greatest part of mankind are thus easily affected by this poison, there are some few who seem to be altogether unsusceptible of the infection: as happens equally with the variolous contagion, though they go into infected places, and expose themselves to inoculation or every hazard by which the disease is generally communicated.

Some persons are more liable than others to be infected who are seemingly of the same habit; nay, the very same person seems to be more liable to be infected at one time than another, and those who have been once infected seem to be more liable to catch the infection a second time, than those who never were infected before with the disease. The climate, season, age, state of health, idiosyncrasy, are, perhaps, as in other diseases, the necessary predisposing causes. The same difference is observable in the progress made by the disease after the patient is infected. In some the progress is slow, and the disease appears scarcely to gain any ground, while in others it advances with the utmost rapidity, and speedily produces the most terrible symptoms. Whether the venereal poison can be absorbed into the system, without a previous excoriation, or ulceration of the genitals, or some other parts of the surface of the body, is still a matter of doubt. Several cases, however, have occurred which render it highly probable, if not certain, that the poison really is now and then absorbed, without any previous excoriation or ulceration whatsoever, and thus produces buboes and other venereal symptoms in the body.

It has been asserted by the earliest and even by some late writers, that it may be caught by lying in the same bed or living in the same room with or after an infected person. What may have been the case at the commencement of the disease, cannot be said, but the most accurate observations and experiments which have been made upon the subject, do not confirm this to be the case in our times. Nor are nurses infected in the Lock-Hospital, where they live night and day with patients in all stages of the distemper. The fact seems to be, that patients in our times are apt to impose upon themselves or upon physicians and surgeons, with regard to this matter; and the above opinion easily gains ground among the vulgar, especially in countries where people are more influenced by prejudices, superstition, servile situation in life, or other circumstances. Hence, we sometimes hear the most ridiculous accounts given in those countries by friars and common soldiers, of the manner by which they came to this disorder: such as piles, gravel, colics, contusions, fevers, little-houses, lying in suspected beds, or lying in bed with a suspected person, retention of the semen, coition with a women in menstruation, the use of cider, bad wine or beer, &c.

Another question undecided is, whether the venereal poison ever infects any fluid of our body, besides those of the mucous and lymphatic system. Does the venereal poison in an infected woman ever affect the milk, and consequently can the infection be conveyed to the infant by the milk alone, without any venereal ulcer on or about the nipples? It is equally a matter of uncertainty whether the venereal disease is ever conveyed from an infected father or mother, by coition, to the fœtus, provided their genitals are sound; or, whether a child is ever affected with venereal symptoms in the uterus of an infected mother. Such infected infants as came under the observation of

Dr. Swediaur or of his friends, whose practice afforded them frequent opportunities of seeing new-born infants, seemed rather to militate against the opinion. Neither he nor any of them, have ever been able to observe ulcerations or other symptoms of a venereal kind upon new-born children; and such as make their appearance four, six, or eight, or more days afterwards, on the genitals, anus, lips, mouth, &c. may rather be supposed to arise by infection during the passage from ulcers in the vagina of the mother, the skin of the infant being then nearly in as tender a state as the glans penis, or the labia; and this perhaps at the time when an absorption of the venereal poison might easier take place without a previous excoriation, or ulceration of the skin. All the ways, therefore, by which we see, in our days, the venereal poison communicated from an unhealthy to a healthy person may be reduced to the following heads:

1. By the coition of an healthy person with another who is infected with venereal disease of the genitals.

2. By the coition of an healthy person with another, apparently healthy, in whose genitals the poison lies concealed, without having yet produced any bad symptom. Thus a woman who has perhaps received the infection from a man two or three days before, may during that time infect, and often does infect the man or men who have to do with her afterwards, without having any symptoms of the disease visible upon herself; and, *vice versâ*, a man may infect a woman in the same manner. Such instances occur in practice every day.

3. By sucking; in this case the nipples of the wet nurse may be infected by venereal ulcers in the mouth of the child: or *vice versâ*, the nipples of the nurse being infected, will occasion venereal ulcers in the child's nose, mouth, or lips. It is uncertain, as mentioned above, whether the venereal poison was ever propagated by means of the milk from the breast.

4. By exposing to the contact of venereal poison any part of the surface of the body, by kissing, touching, &c. especially if the parts so exposed have been previously excoriated, wounded, or ulcerated by any cause whatever. In this manner we frequently see venereal ulcers arise in the scrotum and thighs; and there are some well attested instances where the infection took place in the fingers of midwives or surgeons. Several instances are recorded of venereal ulcers in the nostrils, eyelids, and lips of persons who had touched their own genitals, or those of others, affected at the time with local venereal complaints, and then rubbed their nostrils, &c. with the fingers, without previously washing the hands. There was a few years ago in London, a melancholy example of a young lady, who, after having drawn a decayed tooth, and replaced it with one taken immediately from a young woman apparently in perfect health, was soon after affected with an ulcer in the mouth. The sore manifested symptoms of a venereal nature; but such was its obstinacy, that it resisted the most powerful mercurial remedies, terminating at last in a caries of the maxilla with a most shocking erosion of the mouth and face, by which the unhappy patient was destroyed. During all this, however, we are informed that not the smallest venereal symptom was perceived in the woman from whom the sound tooth was procured.

5. By wounding any part of the body with a lancet or knife infected with the venereal virus. In this instance there is a similarity between the venereal poison and that of the small-pox. There are several examples of the latter being produced by bleeding with a lancet which had been previously employed for the purpose of inoculation, or of opening variolous pustules, without being properly cleaned afterwards. In Moravia, in the year 1577, a number of persons who assembled in a house for bathing, had themselves, according to the custom of that time, scarified by the barber, were all of them infected with the venereal disease, and treated accordingly. Krato, the physician, and Jordan who gave a description of this distemper, are both of opinion that it was communicated by means of the scarifying instrument. And Van Swieten relates several instances where the lues was communicated by a similar carelessness in cleaning the instrument used in bleeding or scarification.

The venereal poison applied to the urethra and vagina produce a clap. See *Gonorrhœa*. Coming into contact with other parts it produces a chancre or bubo and constitutional symptoms. Chancre is the primary and immediate consequence of inoculation with true venereal matter in any of the ways which have been mentioned, and may arise in any part of the human body: but it generally shows itself in the pudenda, because the infecting medium is there first taken up in the one sex, and communicated by contact to the other. It is not, however, peculiar to these parts, for whenever the same kind of fluid is applied to a scratch on the hand, finger, lip, or nipple, the same consequence will follow. There can be no doubt but that the slightest abrasion possible, or breach of the cuticle, is sufficient to give a speedy admission to this destructive poison. A chancre makes its appearance either with a slight inflammation which afterwards ulcerates, or there arises a small pimple or pustule filled with a transparent fluid, which soon breaks and forms into a spreading ulcer. The period at which it makes its appearance after infection is very various, being most commonly in five or six days, but in some cases not till after the expiration of as many weeks. There is both a local and general predisposition to chancres: Jews and Mahommedans, from the constant exposure of the glans and loss of the prepuce, have the cuticle of the glans penis of much firmer texture than those who have not been circumcised; and they are, from this circumstance, much less subject to chancres than the rest of mankind. For the same reason they who, from the shortness of the prepuce, generally keep the glans uncovered, are not so liable to the diseases as those who have long narrow preputia; for persons thus formed constantly keep the surface of the glans and prepuce moist and tender, and almost at every cohabitation are liable to abrasions and to excoriations.

There is an intermediate state of the venereal disease between a local and constitutional affection, which arises from the absorption of venereal matter from some surface to which it has been applied. The glands situated nearest the parts thus affected are apt to become swelled and inflamed, so as to give rise to what is termed *bubo;* and the parts of generation usually coming first in contact with the matter, so the glands in the groin generally afford this particular symptom. In most cases the venereal virus is absorbed from a chancre or an ulcer in the urethra; but instances have occurred where a bubo has arisen without either gonorrhœa or any kind of ulceration, and where the matter appears to have been absorbed, without any erosion of the skin or mucous membrane.

A bubo comes on with a pain in the groin, accompanied with some degree of hardness and swelling, and is at first about the size of a kidney bean, but continuing to increase, it at length becomes as large as an egg, occasions the person to experience some difficulty in walking, and is attended with a pulsation and throbbing in the tumour, and a great redness of the skin. In some cases the suppuration is quickly completed, in others it goes on very slow, and in others again the inflammatory appearances go off without any formation of pus. In a few instances the glands have been known to become scirrhous. The following are the characteristics of a venereal bubo. The swelling is usually confined to one gland, the colour of the skin where inflammation prevails is of a florid red, the pain is very acute, the progress from inflammation to suppuration and ulceration is generally very rapid, the suppuration is large in proportion to the size of the gland, and there is only one abscess.

A bubo is never attended with danger, where the inflamed gland proceeds on regularly to suppuration, but in particular cases it acquires an indolence after coming to a certain length, arising from a scrophulous taint, or by being combined with erysipelas it terminates in gangrene and occasions a great loss of substance. This termination is, however, more frequently met with in hospitals than in private practice, and may partly be attributed to the contaminated state of the air of the wards wherein venereal patients are lodged.

A constitutional taint is the third form under which it has been mentioned, that the venereal poison is apt to show itself, and which always arises in consequence of the matter being absorbed and carried into the circulating mass of fluids. The absorption of it may, however, take place in three ways.

1st. It may be carried into the circulation, without producing any evident local effect on the part to which it was first applied.

2dly. It may take place in consequence of some local affection, such as either gonorrhœa, chancre, or bubo: And,

3dly. It may ensue from an application of the matter to a common sore or wound, similar to what happens in innoculating for the small-pox.

The most general way, however, in which a constitutional taint is produced, is by an absorption of the matter, either from a chancre or a bubo.

When venereal matter gets into the system, some symptoms of it may often be observed in the course of six or eight weeks, or probably sooner; but in some cases, it will continue in the circulating mass of fluids for many months before any visible signs of its effects are produced. The system being completely contaminated, it then occasions many local effects in different parts of the body, and shows itself under a variety of forms, many of which put on the appearance of a distinct disease. We may presume that this variety depends wholly on the difference of constitution, the different kind of parts affected, and the different state these parts were in at the time the matter or poison was applied.

The first symptoms usually show themselves on the skin and in the mouth or throat. When on the skin, reddish and brownish spots appear here and there on the surface, and eruptions of a copper colour are dispersed over different parts of the body, on the top of which there soon forms a thick scurf or scale. This scurf falls off after a short time and is succeeded by another, and the same happening several times, and at length casting off deep scabs, an ulcer is formed which discharges an acrid fœtid matter. When the matter is secreted in the glands of the throat and mouth, the tongue will often be affected so as to occasion a thickness of speech, and the tonsils, palate, and uvula will become ulcerated so as to produce a soreness and difficulty of swallowing, and likewise a hoarseness in the voice. In a venereal ulcer of the tonsil a portion of it seems as if it was dug out; it is, moreover, very foul, and has a thick white matter adhering to it, which cannot be washed off. By these characteristic marks it may, in general, readily be distinguished from any other species of ulceration in these parts.

If the disease affects the eyes, obstinate inflammation, and sometimes ulceration will also attack these organs.

The matter sometimes falls on deep-seated parts, such as the tendons, ligaments, and periosteum, and occasions hard, painful swellings to arise, known by the name of nodes.

When the disease is suffered to take its own course, and not counteracted by proper remedies, the patient will in the course of time, be afflicted with severe pains, but more particularly in the night time; his countenance will become sallow, his hair will fall off, he will lose his appetite, strength and flesh, his rest will be much disturbed by night, and a small fever of the hectic kind will arise. The ulcers in the mouth and throat being likewise suffered to spread, and to occasion a caries of the bones of the palate, an opening will be made from the mouth to the nose, and the cartilages and bones of the nose being at length corroded away, this will sink on a level with the face. Some constitutions will bear up for a considerable time against the disease, whilst others again will soon sink under a general weakness and irritation produced by it. If the disorder is recent, and the constitution not impaired by other diseases, a perfect cure may easily be effected; but where it is of long standing, and accompanied with the symptoms of irritation which have been mentioned, the cure will prove tedious, and in many cases uncertain, as the constitution and strength of the patient may not admit of his going through a course of medicine sufficient to destroy the poison, or his health may be in such a state, as that only a very small quantity of mercury can be administered even at considerable intervals.

The general appearances to be observed on dissection of those who die of lues, are, caries of the bones, but more particularly those of the cranium, often communicating ulceration to the brain itself, together with enlargements and indurations of the lymphatic glands, scirrhus of several of the organs, particularly the liver and lungs, and exostoses of many of the hardest bones.

Sy'philis i'ndica. The yaws.

Sy'philis polo'nica. A variety of venereal disease.

Sy'philis vene'rea. See *Syphilis.*

Syr'iæ o'leum. A fragrant essential oil, obtained by distilling the canary balsam plant, or moldavica.

Syrian herb mastich. See *Teucrium marum.*

Syri'gmus. See *Paracusis.*

Syri'nga. (From συριγξ, a pipe; so called because from its branches pipes were made after the removal of the pith.) The pipe-tree.

Syri'ngmos. See *Paracusis.*

Syringo'tomum. (From συριγξ, a fistula, and τεμνω, to cut.) An instrument to cut fistulas.

Sy'rinx. (Heb.) A pipe. A syringe. A fistula.

Syrmai'smus. (From συρμαιζω, to evacuate.) A gentle evacuation by vomit or stool.

Syrup of buckthorn. See *Syrupus rhamni.*

Syrup of ginger. See *Syrupus zingiberis.*

Syrup of lemon. See *Syrupus limonum.*

Syrup of marsh-mallows. See *Syrupus althææ.*

Syrup of mulberry. See *Syrupus mori.*

Syrup of orange. See *Syrupus aurantii.*

Syrup of poppy. See *Syrupus papaveris.*

Syrup of red poppy. See *Syrupus Rhœados.*

Syrup of roses. See *Syrupus rosæ.*

Syrup of saffron. See *Syrupus croci.*

Syrup of senna. See *Syrupus sennæ.*

Syrup of Tolu. See *Syrupus Tolutanus.*

SYRUPUS. (*Serab*, a potion, Arab.)

1. When sugar is dissolved in any vegetable liquor, to the consistence of thin honey, a medical preparation is formed called a syrup; which, if obtained from a single plant, is called *simple;* but if from more than one, *compound.* To keep syrups without fermenting, it is necessary that their temperature should be attended to, and kept as near 55° as possible. A good cellar will answer this purpose, for there are few summers in which the temperature of such a place rises to 60°.

2. The name syrup is also given, when sugar is dissolved in water; and in the present pharmacopœia this is termed simple syrup. See *Syrupus simplex.*

Syru'pus ace'ti. Sugar and vinegar. A refrigerating and antiseptic syrup.

Syru'pus althæ'æ. Syrup of marsh-mallow. *Syrupus ex althæa. Syrupus de althæa.* "Take of the fresh root of marsh-mallow, bruised, half a pound; refined sugar, two pounds; water, a gallon. Boil down the water with the marsh mallow-root to half, and press out the liquor when cold. Set it by for 24 hours, that the fæculencies may subside; then pour off the liquor, and having added the sugar, boil it down to a proper consistence." An emollient and demulcent; mostly given to allay tickling coughs, hoarseness, &c. in conjunction with other remedies.

Syru'pus aura'ntii. Syrup of orange. *Syrupus corticis aurantii. Syrupus e corticibus aurantiorum. Syrupus de cortice aurantiorum.* "Take of fresh orange-peel, two ounces; boiling-water, a pint; refined sugar, three pounds. Macerate the orange-peel in the water for 12 hours in a covered vessel; then pour off the liquor, and add the sugar." A pleasant bitter and stomachic.

Syru'pus caryophy'lli ru'bri. A warm and stimulating syrup.

Syru'pus co'lchici. An acrid and diuretic compound given in dropsies.

Syru'pus co'rticis aura'ntii. See *Syrupus aurantii.*

Syru'pus cro'ci. Syrup of saffron. "Take of saffron, an ounce; boiling water, a pound; refined sugar, two pounds and a half. Macerate the saffron in the water for 12 hours in a covered vessel, then strain the liquor, and add the sugar." This imparts a beautiful colour to liquids, and is sometimes employed as a cordial. Amongst the vulgar syrup of saffron is in high esteem in measles, small-pox, &c.

Syru'pus limo'num. Syrup of lemon. *Syrupus succi limonis. Syrupus e succo limonum. Syrupus e succo citrorum.* "Take of lemon-juice, strained, a pint; refined sugar, two pounds. Dissolve the sugar in the lemon-juice in the manner directed for simple syrup." A very pleasant, cooling, and acid syrup which may be exhibited with advantage, in febrile and bilious affections.

Syru'pus mo'ri. Syrup of mulberry. *Syrupus mororum.* "Take of mulberry-juice, strained, a pint; refined sugar, two pounds. Dissolve the sugar in the mulberry-juice in the manner directed for simple syrup." Syrup of mulberries is very grateful and aperient, and may be given with such intentions to children.

Syru'pus papa'veris. *Syrupus papaveris albi. Syrupus e meconio. Syrupus de meconio, sive diacodium.* "Take of capsules of white poppy, dried and bruised, the seeds being separated, 14 ounces; refined sugar, two pounds; boiling-water, two gallons and a half. Macerate the capsules in the water for 24 hours, then boil it down by means of a water-bath to one gallon, and press out the liquor strongly. Boil down the liquor again, after being strained, to two pints, and strain it while hot. Set it by for 12 hours, that the fæculencies may subside: then boil down the clear liquor to a pint, and add the sugar in the manner directed for simple syrup." It should be kept in stone bottles and in a cellar. A useful anodyne preparation which may be added with advantage to a vast variety of medicines against diseases of the bowels, coughs, &c.

Syru'pus papa'veris erra'tici. See *Syrupus rhœados.*

Syru'pus rhœ'ados. *Syrupus papaveris erratici. Syrupus de papavere erratico.* Syrup of red-poppy. "Take of red-poppy petals, fresh, a pound; boiling-water, a pint and two fluid ounces; refined sugar, two pounds and a half. Having heated the water in a water-bath, add gradually the red poppy petals, frequently stirring them; then having removed the vessel, macerate for twelve hours; next press out the liquor, and set it by to settle; lastly, add the sugar, as directed for simple syrup." This is a very mild anodyne, and used more for the colour, than for its medical properties.

Syru'pus rha'mni. Syrup of buckthorn. "Take of the fresh juice of buckthorn-berries, four pints; ginger-root, sliced, all-spice, powdered, of each half an ounce; refined sugar, three pounds, and a half. Set by the juice for three days that the fæculencies may subside, and strain. To a pint of the clear juice add the ginger and allspice; then macerate in a gentle heat four hours, and strain; boil down what remains to one pint and a half, mix the liquors, and add the sugar in the manner directed for simple syrup."

This preparation, in doses of three or four spoonfuls, operates as a brisk cathartic. The principal inconvenience attending it is, that it is very unpleasant, and occasions a thirst and dryness of the mouth and fauces, and sometimes violent gripes; these effects may be prevented by drinking liberally of water-gruel, or other warm liquids during the operation.

Syru'pus ri'bis ni'gri. Syrup of black currants. Aperient and diuretic qualities are attributed to this preparation.

Syru'pus ro'sæ. Syrup of roses. *Syrupus rosarum solutivus. Syrupus e rosis siccis.* "Take of damask-rose petals, dried, seven ounces; refined sugar, six pounds; boiling-water, four pints. Macerate the rose-petals in the water for twelve hours, and strain; then evaporate the strained liquor, by means of a water-bath, to two pints and a half; then add the sugar in the manner described for simple syrup." A useful laxative for children. From ʒj. to ℥ss.

Syru'pus ru'bi idæ'i. Syrup of raspberry. A pleasant aperient syrup for children.

Syru'pus scilli'ticus. Expectorant and diuretic.

Syru'pus se'nnæ. Syrup of senna. "Take of senna-leaves, two ounces; fennel-seed, bruised, an ounce; manna, three ounces; refined sugar, a pound; water boiling, a pint. Macerate the senna-leaves and fennel-seeds in the water for an hour with a gentle heat; strain the liquor, and mix with it the manna and sugar; then boil to the proper consistence." A useful purgative for children.

Syru'pus si'mplex. *Syrupus.* Simple syrup. "Take of refined sugar, two pounds and a half; water a pint. Dissolve the sugar in the water in a water-bath; then set it aside for twenty-four hours; take off the scum, and if there be any fæculencies, pour off the clear liquor from them."

Syru'pus Toluta'nus. Syrup of Tolu. "Take of balsam of Tolu, an ounce;

water, boiling, a pint; refined sugar, two pounds. Boil the balsam in the water half an hour in a covered vessel, occasionally stirring it, strain the liquor when it is cold, and then add the sugar, in the manner directed for simple syrup." A useful balsamic syrup, calculated to allay tickling coughs and hoarsenesses.

Syru′pus vi′olæ. A pleasant laxative for young children.

Syru′pus zingi′beris. Syrup of ginger. "Take of ginger-root, sliced, two ounces; water, boiling, a pint; refined sugar, two pounds. Macerate the ginger-root in the water for twenty-four hours, and strain, then add the sugar in the manner directed for simple syrup." A carminative and stomachic syrup. Dose from one to three drachms.

SYSSARCO′SIS. (From συν, and σαρξ, flesh.) A species of union of bones in which one bone is united to another by means of an intervening muscle. In this manner the os hyoides is connected with the sternum and other parts.

System, absorbent. See *Absorbents* and *Lymphatics.*

System, genital. The parts of generation.

System, nervous. See *Nerve.*

System vascular. The arteries and veins.

SY′STOLE. (From συστελλω, to contract.) The contraction of the heart.

T.

T BANDAGE. A bandage so named from its figure. It is principally used for supporting the dressings, after the operation for fistula in ano, in diseases of the perinæum, and those of the groins, anus, &c.

Taba′cum. (From *Tobago,* the island from whence it was first brought.) Tobacco. See *Nicotiana.*

Tabe′lla. (Dim. of *tabula,* a table.) A lozenge.

TA′BES. (From *tabesco,* to consume or pine away.) A wasting of the body. A genus of disease in the Class, *Cachexiæ,* and Order, *Marcores,* of Cullen; characterised by emaciation and weakness, attended with hectic fever, but without any cough or spitting, which last symptoms distinguish it from phthisis. It has three species: 1. *Tabes purulenta,* from an ulcerous discharge: 2. *Tabes scrofulosa,* from a scrofulous habit: 3. *Tabes venenata,* from poison. See *Atrophy.*

Ta′bes coxa′ria. *Phthisis ischiadica.* A wasting of the thigh and leg from an abscess, or other cause in the hip.

Ta′bes dorsa′lis. *Lordosis.* Dr. Cullen makes it a variety of *atrophia inanitorum.* Hippocrates calls it *tabes ossis sacri.* At present by the name of tabes dorsalis is understood a wasting of the body, attended at first with pain in the back or loins, and afterwards also in the neck and head, caused by a too early or a too frequent use of venery.

Ta′bes nutri′cum. A variety of atrophia inanitorum.

Ta′bes o′ssis sa′cri. Hippocrates' name for tabes dorsalis.

Ta′bes pulmona′lis. A name for phthisis.

Ta′bes rena′lis. An abscess of the kidney.

Ta′bes syphili′tica. A variety of the atrophia cacochymica.

Tacamaha′cca. (Indian.) See *Fagara octandra.*

Ta′ctus. See *Touch.*

Tæ′da. (Δαιδα, from δαω, to burn.) A torch. A species of pine which burns like a torch. A medicated torch for fumigations.

TÆ′NIA. (Ταινια, a Hebrew word, signifying a fillet; so named from its resemblance to a fillet or piece of tape.) The tape-worm. A genus of intestinal worms; characterised by a long, flat, and jointed body. Species: 1. *Tænia osculis marginalibus,* the long tape-worm, and the solium of authors, which is peculiar to this country, Russia, France, &c.: 2. *Tænia osculis superficialibus,* the broad tape-worm, which is peculiar to the inhabitants of Switzerland, &c. See *Worms.*

Talc. See *Talcum.*

Ta′lcum. (From *talk,* German.) Talc. A white, grey, yellow, or greenish substance of a soft and soapy touch, formed of transparent laminæ placed upon each other. Talc is composed of pure magnesia mixed with near twice its weight of silex and less than its weight of alumine. There are several different appearances of talc. The greenish foliaceous Venice talc was formerly used medicinally, as possessing antacid and aperient qualities.

Ta′lpa. (From τυφλος, blind.) *Talparia.* A mole. Also, a tumour resembling a mole in eating, and creeping under the skin.

Ta′lus. A synonym of Astragalus. See *Astragalus.*

Tamalapa′tra. The Indian leaf is so termed by some authors. See *Laurus cassia.*

Tamarind. See *Tamarindus.*

TAMARI′NDUS. (From *tamar* or *tamarindi*, which is, in the Arabian language, a synonym of the dactylus or date.)

1. The name of a genus of plants. Class, *Monadelphia.* Order, *Triandria.* The tamarind tree.
2. The pharmacopœial name of the tamarind fruit.

Tamari′ndus i′ndica. The systematic name of the tamarind-tree. *Oxyphœnicon. Siliqua arabica. Balampulli. Tamaræa zecla oxyphœnicia. Acacia indica.* The pulp of the tamarind, with the seeds, connected together by numerous tough strings or fibres, are brought to us freed from the outer shell, and commonly preserved in syrup. According to Long, tamarinds are prepared for exportation at Jamaica, in the following manner: "The fruit or pods are gathered in June, July, and August, when full ripe, which is known by their fragility or easy breaking on small pressure between the finger and thumb. The fruit taken out of the pod, and cleared from the shelly fragments, is placed in layers in a cask, and boiling syrup, just before it begins to granulate, is poured in, till the cask is filled: the syrup pervades every part quite down to the bottom, and when cool the cask is headed for sale." The tamarind is employed as a laxative, and for abating thirst or heat in various inflammatory complaints, and for correcting putrid disorders, especially of a bilious kind, in which the cathartic, antiseptic, and refrigerant qualities of the fruit have been found equally useful. When intended merely as a laxative, it may be of advantage, (Dr. Woodville observes) to join it with manna or purgatives of a sweet kind, by which its use is rendered safer and more effectual. Three drachms of the pulp are usually sufficient to open the body, but to prove moderately cathartic, one or two ounces are required. It is an ingredient in the *confectio cassiæ*, and *confectio sennæ.*

Tamari′scus. (From *Tamarik*, abstersion, Heb. named from its properties of cleansing and purifying the blood.) See *Tamarix gallica.*

TA′MARIX. The name of a genus of plants. Class, *Pentandria.* Order, *Digynia.* The tamarisk tree.

Ta′marix ga′llica. The systematic name of the tamarisk tree. *Tamariscus.* Tamarisk. The bark, wood, and leaves of this tree, were formerly employed medicinally, though seldom used at present. The former for its aperient and corroborant virtues in obstructions of the liver; the latter in icterus, hæmoptysis, and some affections of the skin.

Tame-poison. See *Asclepias vincetoxicum.*

TANACE′TUM. (Corrupted from *tanasia, athanasia*, the old name for tansy.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia superflua.* Tansy.
2. The pharmacopœial name of the tansy. See *Tanacetum vulgare.*

Tanace′tum balsami′ta. The systematic name of the officinal alecost. *Balsamita mas. Balsamita major. Tanacetum hortense. Costus hortorum.* Costmary, or alecost. The plant which bears this name in the pharmacopœias, is the *Tanacetum balsamita; foliis ovatis, integris, serratis*, of Linnæus. A fragrant-smelling herb, somewhat like that of mint; formerly esteemed as a corroborant, carminative, and emmenagogue.

Tanace′tum horte′nse. See *Balsamita mas.*

Tanace′tum vulga′re. The systematic name of the common tansy. *Tanasia. Athanasia. Parthenium mas. Tanacetum vulgare; foliis bipinnatis incisis serratis*, of Linnæus. The leaves and flowers of tansy have a strong, not very disagreeable smell, and a bitter somewhat aromatic taste. The virtues of tansy are tonic, stomachic, anthelmintic, emmenagogue, and resolvent. It has been much used as a vermifuge; and testimonies of its efficacy are given by many respectable physicians. Not only the leaves but the seeds have been employed with this intention, and substituted for those of santonicum. We are told by Dr. Clark, that in Scotland tansy was found to be of great service in various cases of gout; and Dr. Cullen, who afterwards was informed of the effect it produced upon those who had used the herb for this purpose says, "I have known several who have taken it without any advantage, and some others who reported that they had been relieved from the frequency of their gout." Tansy is also recommended in the hysteria, especially when this disease is supposed to proceed from menstrual obstructions.

This plant may be given in powder to the quantity of a drachm or more for a dose; but it has been more commonly taken in infusion, or drank in tea.

Tana′sia. See *Tanacetum.*

Tansy. See *Tanacetum.*

Tansy, wild. See *Potentilla.*

Tape-worm. See *Tænia.*

Tapioca. See *Jatropha manihot.*

Tapping. See *Paracentesis.*

Ta′psus barba′tus. See *Verbascum.*

Tar. See *Pinus sylvestris.*

Tar, Barbadoes. See *Petroleum barbadense.*

Tar-water. A once celebrated remedy, but now neglected more than it deserves. It is made by infusing tar in water, stirring it from time to time, and lastly pouring off the clear liquor now impregnated with the colour and virtues of the tar. It is drunk in many chronic affections, particularly of the lungs.

Taranti'smus. (From *tarantula*, the animal whose bite is supposed to be cured only by music.) The desire of dancing which is produced by the bite of the tarantula.

Tara'ntula. (From *Taranta*, a city in Naples, where they abound.) A kind of venomous spider, whose bite is said to be cured by music.

Tara'xacum. (From ταρασσω, to alter or change; because it alters the state of the blood.) See *Leontodon*.

Tara'xis. (From ταρασσω, to disturb.) A slight ophthalmy or inflammation of the eye.

Ta'rchon sylve'stris. See *Achillea ptarmica*.

Tare. See *Ervum*.

Ta'rsi exte'nsor mi'nor. See *Plantaris*.

TA'RSUS. Ταρσος. 1. The instep or that part of the foot which is between the leg and metatarsus: it is composed of seven bones, viz. the astragalus, os calcis, os naviculare, os cuboides, and three ossa cuneiformia.

2. The thin cartilage situated at the edges of the eyelids to preserve their firmness and shape.

TARTAR. (*Tartarum*, from ταρταρος, infernal; because it is the sediment or dregs.)

1. The concretion which fixes to the inside of hogsheads containing wine. It is alloyed with much extractive and colouring matter, from which it is purified by decoction with argillaceous earths and subsequent crystallization. By this means it becomes perfectly white, and shoots out crystals of tartar, consisting of a peculiar acid called acid of tartar, imperfectly saturated with potash; it is therefore a super-tartrate of that alkali, which, when powdered, is the cream of tartar of the shops. Its virtues are eccoprotic, diuretic, and refrigerant, and it is exhibited in abdominal physconia, dropsy, inflammatory and bilious fevers, dyspepsia, from rancid or fat substances, bilious diarrhœa and colic, hæmorrhoids and obstipation.

2. A name heretofore given to many officinal preparations, containing the acid of tartar; but in consequence of recent changes in the chemical nomenclature superseded by appellations more expressive of the respective compositions.

TARTARIC ACID. *Acidum tartaricum. Sal essentiale tartari. Acidum tartari essentiale.* Tartareous acid. To obtain the pure tartaric acid, take two pounds of the crystals, and dissolve them in water, into which chalk is to be thrown by degrees till the liquid is saturated. A precipitate is formed, which is a true tartrate of lime, is tasteless, and cracks between the teeth. This tartrate is put into a cucurbit, and nine ounces of sulphuric acid, with five ounces of water, are poured on it. After twelve hours digestion, with occasional stirring, the tartaric acid is set at liberty in the solution, and may be cleared of the sulphate of lime by means of cold water. The virtues of this acid are antiseptic, refrigerant, and diuretic. It is used in acute fevers, scurvy, and hæmorrhage.

Tartar, cream of. The popular name of the purified supertartrate of potash.

Tartar, emetic. See *Antimonium tartarizatum*.

Tartar, oil of. See *Potassæ subcarbonatis liquor*.

Tartar, regenerated. See *Potassæ acetas*.

Tartar, salt of. See *Potassæ subcarbonas*.

Tartar, soluble. See *Potassæ tartras*.

Tartar, spirit of. If the crystals of tartar be distilled by a strong heat, without any additional body, they furnish an empyreumatic acid, called the pyrotartareous acid, or spirit of tartar, and a very fœtid empyreumatic oil.

Tartar, vitriolated. See *Potassæ sulphas*.

Ta'rtarum eme'ticum. See *Antimonium tartarizatum*.

Ta'rtarum regenera'tum. See *Potassæ acetas*.

Ta'rtarum solu'bile. See *Potassæ tartras*.

Ta'rtarus ammo'niæ. See *Tartras ammoniæ*.

Ta'rtarus chalybea'tus. See *Ferrum tartarizatum*.

Ta'rtras ammo'niæ. *Alkali volatile tartarizatum*, of Bergman. *Sal ammoniacum tartareum. Tartarus ammoniæ.* A salt composed of tartaric acid and ammonia, its virtues are diaphoretic, diuretic, and deobstruent. It is prescribed in fevers, atonic exanthemata, catarrh, arthritic and rheumatic arthrodynia, hysteric spasms, &c.

Ta'rtras pota'ssæ. See *Potassæ tartras*.

Ta'rtras pota'ssæ aci'dulus. Cream of tartar. See *Tartar*.

Ta'rtras pota'ssæ aci'dulus ferra'tus. *Globuli martiales. Tartarus chalybeatus. Mars solubilis. Ferrum potabile.* Its virtues are adstringent. It is principally used externally in the form of fomentations or bath in contusions, distortions, and luxations.

Ta'rtras pota'ssæ aci'dulus stibia'tus. See *Antimonium tartarizatum*.

Ta'rtras so'dæ. See *Soda tartarizata*.

TASTE. *Gustus.* The organ of taste

differs but slightly from that of touch. It appears, by certain experiments, to be seated chiefly in those nervous papillæ of the tongue which are formed from the minute ends of the ninth or lingual pair of nerves; for neither does sugar, applied to any other part of the mouth, excite the least sense of taste in the mind; nor any other sapid body, unless it contain something vehemently penetrating; in which case the palate, root of the tongue, uvula, and even the œsophagus, are affected by the sapid acrimony. That sensation, which is sometimes excited in the stomach, œsophagus, and fauces, by the regurgitation of the aliments, seems also to belong to the tongue, to which the sapid vapours are applied.

Nature designed the diversity of flavours, that animals might know those things most proper for their food; for in general, there is no aliment unhealthy, that is of an agreeable taste; nor is any thing ill tasted that is fit for the food of man. We here take no notice of excess, by which the most healthy food may become prejudicial, or of minerals, which are not furnished by nature, but prepared by art. Thus nature has invited man to take the food necessary for his subsistence, both by the pain called hunger, and by the pleasure arising from taste. But animals, which do not learn from example and the instruction of others, distinguish flavours most accurately, and, admonished by that test, abstain cautiously from unhealthy food; and, therefore, herbivorous animals especially, to which a very great diversity of aliments mixed with noxious plants are offered, are furnished with such long papillæ, and so elegant a structure of the tongue, for which man has less occasion.

TA'XIS. An operation, by which those parts which have quitted their natural situation are replaced by the hand without the assistance of instruments, as in reducing hernia, &c.

Tea. See *Thea.*

TEAR. *Lachryma.* The limpid fluid secreted by the lachrymal glands, and flowing on the surface of the eyes.

The organ which secretes this liquid is the lachrymal gland, one of which is situated in the external canthus of each orbit, and emits six or seven excretory ducts, which open on the internal surface of the upper eyelid above its tarsus, and pour forth the tears. The tears have mixed with them an arterious roscid vapour, which exhales from the internal surface of the eyelids, and external of the tunica conjunctiva, into the eye. Perhaps the aqueous humour also transudes through the pores of the cornea on the surface of the eye. A certain part of this aqueous fluid is dissipated in the air; but the greatest part, after having performed its office, is propelled by the orbicular muscle, which so closely constringes the eyelid to the ball of the eye, as to leave no space between, unless in the internal angle, where the tears are collected. From this collection the tears are absorbed by the orifices of the puncta lachrymalia; from thence they are propelled through the lachrymal canals, into the lachrymal sac, and flow through the ductus nasalis into the cavity of the nostrils, under the inferior concha nasalis. The *lachrymal sac*, appears to be formed of longitudinal and transverse muscular fibres; and its three orifices furnished with small sphincters, as the spasmodic constriction of the puncta lachrymalia proves, if examined with a probe.

The tears have no smell but a saltish taste, as people who cry perceive. They are of a transparent colour and aqueous consistence.

The *quantity*, in its natural state, is just sufficient to moisten the surface of the eye and eyelids; but from sorrow, or any kind of stimulus applied to the surface of the eye, so great is the quantity of tears secreted, that the puncta lachrymalia are unable to absorb them. Thus the greatest part runs down from the internal angle of the eyelids, in the form of great and copious drops upon the cheeks. A great quantity also descends, through the lachrymal passages into the nostrils; hence those who cry have an increased discharge from the nose.

Use of the Tears. — 1. They continually moisten the surface of the eye and eyelids, to prevent the pellucid cornea from drying and becoming opaque, or the eye from concreting with the eyelids. 2. They prevent that pain, which would otherwise arise from the friction of the eyelids against the bulb of the eye from continually winking. 3. They wash and clean away the dust of the atmosphere, or any thing acrid that has fallen into the eye. 4. Crying unloads the head of congestions.

TEETH. (*Dens*, a tooth; *quasi edens*, from *edo*, to eat.) Small bones fixed in the alveoli of the upper and under jaw. In early infancy Nature designs us for the softest aliment, so that the gums alone are then sufficient for the purpose of manducation; but as we advance in life, and require a different food, she wisely provides us with teeth. These are the hardest and whitest of our bones, and, at full maturity, we usually find thirty-two in both jaws; viz. sixteen above, and as many below. Their number varies indeed in different subjects; but it is seldom seen to exceed thirty-two, and it will very rarely be found to be less than twenty-eight.

Each tooth may be divided into two parts; viz. its body, or that part which appears above the gums; and its fangs or root, which is fixed into the socket. The boundary between these two, close to the edge of the gum, where there is usually a small circular depression, is called the neck of the tooth. The teeth of each jaw are commonly divided into three classes; but before each of these is treated of in particular, it will be right to say something of their general structure.

Every tooth is composed of its *cortex* or *enamel*, and its internal boney substance. The enamel, or as it is sometimes called, the vitreous part of the tooth, is a very hard and compact substance, of a white colour, and peculiar to the teeth. It is found only upon the body of the tooth, covering the outside of the bony or internal substance. When broken it appears fibrous or striated; and all the striæ are directed from the circumference to the centre of the tooth. This enamel is thickest on the grinding surface, and on the cutting edges or points of the teeth, becoming gradually thinner as it approaches the neck, where it terminates insensibly. Some writers have described it as being vascular, but it is certain that no injection will ever reach this substance; that it receives no tinge from madder: and that it affords no appearance of a circulation of fluids. The bony part of a tooth resembles other bones in its structure, but is much harder than the most compact part of bones in general. It composes the inner part of the body and neck, and the whole of the root of the tooth. This part of a tooth, when completely formed, does not, like the other bones, receive a tinge from madder, nor do the minutest injections penetrate into its substance, although many writers have asserted the contrary. Mr. Hunter has been therefore induced to deny its being vascular, although he is aware that the teeth, like other bones, are liable to swellings, and that they are found anchylosed with their sockets. He supposes, however, that both these may be original formations; and, as the most convincing proof of their not being vascular, he reasons from the analogy between them and other bones. He observes, for instance, that in a young animal that has been fed with madder, the parts of the teeth which were formed before it was put on madder diet will appear of their natural colour, but that such parts as were formed while the animal was taking the madder, will be of a red colour; whereas, in other bones, the hardest parts are susceptible of the dye, though more slowly than the parts which are growing. Again he tells us, that if you leave off feeding the animal with madder a considerable time before you kill it, you will find the above appearances still subsisting, with this addition, that all the parts of the teeth which were formed after leaving off the madder will be white. This experiment proves that a tooth once tinged does not lose its colour; whereas other bones do (though very slowly) return again to their natural appearance: and, as the dye in this case must be taken into the habit by absorbents, he is led to suspect that the teeth are without absorbents as well as other vessels. These arguments are very ingenious, but they are far from being satisfactory. The facts adduced by Mr. Hunter are capable of a different explanation from that which he has given them; and when other facts are added relative to the same subject, it will appear that this bony part of a tooth has a circulation through its substance, and even lymphatics, although, from the hardness of its structure, we are unable to demonstrate its vessels. The facts which may be adduced are, 1st. We find that a tooth recently drawn and transplanted into another socket, becomes as firmly fixed after a certain time, and preserves the same colour as the rest of the set; whereas a tooth that has been long drawn before it is transplanted, will never become fixed. Mr. Hunter, indeed, is aware of this objection, and refers the success of the transplantation, in the first instance, to the living principle possessed by the tooth, and which he thinks may exist independent of a circulation. But however applicable such a doctrine may be to zoophytes, it is suspected that it will not hold good in man, and others of the more perfect animals: and there does not appear to be any doubt but that, in the case of a transplanted tooth, there is a real union by vessels. 2dly. The swellings of the fangs of a tooth, which in many instances are known to be the effects of disease, and which are analogous to the swelling of other bones, are a clear proof of a similarity of structure, especially as we find them invested with a periosteum. 3dly. It is a curious fact, though as yet perhaps not generally known, that, in cases of phthisis pulmonalis, the teeth become of a milky whiteness, and in some degree, transparent; does not this prove them to have absorbents?

Each tooth has an inner cavity, which, beginning by a small opening at the point of the fang, becomes larger, and terminates in the body of the tooth. This cavity is supplied with blood vessels and nerves, which pass through the small hole in the root. In old people this hole sometimes closes, and the tooth becomes then insensible.

The teeth are invested with a periosteum from their fangs to a little beyond their bony sockets, where it is attached to the gums. This membrane seems to be common to the tooth which it encloses, and to the sockets which it lines. The teeth are likewise secured in their sockets by a red substance called the *gums*, which every where covers the alveolar processes, and has as many perforations as there are teeth. The gums are exceedingly vascular, and have something like cartilaginous hardness and elasticity, but do not seem to have much sensibility. The gums of infants, which perform the offices of teeth, have a hard ridge extending through their whole length; but in old people, who have lost their teeth, this ridge is wanting. The three classes into which the teeth are commonly divided are, *incisores*, *canini*, and *molares* or *grinders*.

The *incisores* are the four teeth in the fore part of each jaw; they derive their name from their use in dividing and cutting the food in the manner of a wedge, and have each of them two surfaces, which meet in a sharp edge. Of these surfaces, the anterior one is convex, and the posterior one somewhat concave. In the upper jaw they are usually broader and thicker, especially the two middle ones, than those of the under jaw, over which they generally fall by being placed a little obliquely.

The *canini* or *cuspidati* are the longest of all the teeth, deriving their name from their resemblance to a dog's tusk. There is one of these teeth on each side of the incisores, so that there are two in each jaw. They are the longest of all the teeth. Their fangs differ from that of the incisores only in being much larger, and their shape may be easily described to be that of an incisor with its edge worn off, so as to end in a narrow point instead of a thin edge. The canini not being calculated for dividing like the incisores, or for grinding, seem to be intended for laying hold of substances. Mr. Hunter remarks of these teeth, that we may trace in them a similarity in shape, situation, and use, from the most imperfect carnivorous animal, which we believe to be the human species, to the lion, which is the most perfectly carnivorous.

The *molares*, or grinders, of which there are ten in each jaw, are so called, because from their size and figure they are calculated for grinding the food. The canini and incisores have only one fang, but the three last grinders in the under jaw have constantly two fangs, and the same teeth in the upper jaw three fangs. Sometimes these fangs are divided into two points near their base, and each of these points has, perhaps, been sometimes considered as a distinct fang. The grinders likewise differ from each other in their appearance. The two first on each side, which Mr. Hunter appears to have distinguished very properly by the name of *bicuspides*, seem to be of a middle nature between the incisores and grinders; they have in general only one root, and the body of the tooth terminates in two points, of which the anterior one is the highest, so that the tooth has in some measure the appearance of one of the canini. The two grinders beyond these, on each side, are much larger. Their body forms almost a square with rounded angles; and their grinding surface has commonly five points or protuberances, two of which are on the inner, and three on the outer part of the tooth. The last grinder is shorter and smaller than the rest, and, from its coming through the gums later than the rest, and sometimes not appearing till late in life, is called *dens sapientiæ*. The variation in the number of teeth usually depends on these dentes sapientiæ.

Having thus described the appearance of the teeth in the adult; the manner of their formation and growth in the fœtus is next to be considered. We shall find that the alveolar process, which begins to be formed at a very early period, appears about the fourth month, only as a shallow longitudinal groove, divided by slight ridges into a number of intermediate depressions, which are to be the future alveoli or sockets. These depressions are at first filled with small pulpy substances, included in a vascular membrane; and these pulpy substances are the rudiments of the teeth. As these advance in their growth, the alveolar processes become gradually more completely formed. The surface of the pulp first begins to harden; the ossification proceeding from one or more points, according to the kind of tooth that is to be formed. Thus in the incisores and canini, it begins from one point; in the bicuspides, from two points, corresponding with the future shape of those teeth; and in the molares from four or five points. As the ossification advances, the whole of the pulp is gradually covered with bone, excepting its under surface, and then the fang begins to be formed. Soon after the formation of this bony part, the tooth begins to be encrusted with its enamel; but in what manner this is deposited we are as yet unable to explain. — Perhaps the vascular membrane, which encloses the pulp, may serve to secrete it. It gradually crystallizes upon the surface of the bony part, and continues to increase in thickness, especially at the points and basis of the tooth, till some time before the tooth begins to pass through the gum; and when this happens, the enamel seems to be as hard as it is afterwards, so that the air does not appear to have the least effect in hardening it, as has been sometimes supposed. — While the enamel is thus forming, the lower part of the pulp is gradually lengthened out and ossified, so as to form the fang. In those teeth which are to have more than one fang, the ossification begins from different parts of the pulp at one and the same time. In this manner are formed the incisores, the canini, and two molares on each side, making in the whole twenty teeth, in both jaws, which are sufficient for the purposes of manducation early in life. As the fangs of the teeth are formed, their upper part is gradually pushed upwards, till at length, about the seventh, eighth, or ninth month after birth, the incisores, which are the first formed, begin to pass through the gum. The first that appears is generally in the lower jaw. The canini and molares not being formed so soon as the incisores, do not appear till about the twentieth or twenty-fourth month. Sometimes one of the canini, but more frequently one of the molares appears first.

The danger to which children are exposed, during the time of dentition, arises from the pressure of the teeth in the gum, so as to irritate it, and excite pain and inflammation. The effect of this irritation is, that the gum wastes, and becomes gradually thinner at this part, till at length the tooth protrudes. In such cases therefore we may, with great propriety, assist nature by cutting the gum. These twenty teeth are called *temporary*, or *milk* teeth, because they are all shed between the age of seven and fourteen, and are supplied by others of a firmer texture, with large fangs, which remain till they become affected by disease, or fall out in old age, and are therefore called the *permanent*, or *adult* teeth. The rudiments of these adult teeth begin to be formed at different periods. The pulp of the first adult incisor, and of the first adult grinder, may be perceived in a fœtus of seven or eight months, and the ossification begins in them about six months after birth. Soon after birth the second incisor, and canine tooth on each side, begin to be formed. About the fifth or sixth year the first bicuspis, and about the seventh the second bicuspis begins to ossify. These bicuspides are destined to replace the temporary grinders. All these permanent teeth are formed in a distinct set of alveoli; so that it is not by the growing of one tooth under another in the same socket, that the uppermost tooth is gradually pushed out, as is commonly imagined; but the temporary teeth, and those which are to succeed them, being placed in separate alveoli, the upper sockets gradually disappear, as the under ones increase in size, till at length the teeth they contain, having no longer any support, consequently fall out. But, besides these twenty teeth, which succeed the temporary ones, there are twelve others to be added to make up the number thirty-two. These twelve are three grinders on each side in both jaws; and in order to make room for this addition, we find the jaws grow as the teeth grow, so that they appear as completely filled with twenty teeth, as they are afterwards with thirty-two. Hence, in children the face is flatter and rounder than in adults. The first adult grinder usually passes through the gum about the twelfth year; the second, which begins to be formed in the sixth or seventh year, cuts the gum about the seventeenth or eighteenth; and the third, or dens sapientiæ, which begins to be formed about the twelfth year, passes through the gum between the age of twenty and thirty. The dentes sapientiæ have, in some instances, been cut at the age of forty, fifty, sixty, and even eighty years; and it sometimes happens, that they do not appear at all. Sometimes likewise it happens, that a third set of teeth appear about the age of sixty or seventy. Diemerbroeck tells us that he himself, at the age of fifty-six, had a fresh canine tooth in the place of one he had lost several years before; M. du Fay saw two incisores and two canini cut the gum in a man aged eighty-four; Mr. Hunter has seen two foreteeth shoot up in the lower jaw of a very old person; and an account was lately published of a man who had a complete set of teeth at the age of sixty. Other instances of the same kind are to be met with in authors. The circumstance is curious, and from the time of life at which it takes place, and the return of the catamenia, which sometimes happens to women at the same age, it has been very ingeniously supposed, that there is some effort in nature to renew the body at that period.

The teeth are subject to a variety of *accidents*. Sometimes the gums become so affected as to occasion them to fall out, and the teeth themselves are frequently rendered carious by causes which have not hitherto been satisfactorily explained. The disease usually begins on that side of the tooth which is not exposed to pressure, and gradually advances till an opening is made into the cavity: as soon as the cavity is exposed, the tooth becomes liable to considerable pain, from the air coming into contact with the nerve. Besides these accidental means by which the teeth are occasionally affected, old age seldom fails to bring with it sure and natural causes for their removal. The alveoli fill up, and the teeth consequently fall out. The gums then no longer meet in the fore part of the mouth, the chin projects forwards, and the face being rendered much shorter, the whole physiognomy appears considerably altered. Having thus described the formation, structure, growth, and decay of the teeth, it remains to speak of their uses; the chief of which we know to be in mastication. And here we cannot help observing the great variety in the structure of the human teeth, which fits us for such a variety of food, and which, when compared with the teeth given to other animals, may in some measure enable us to explain the nature of the aliment for which man is intended by Nature. Thus, in ruminating animals, we find incisores only in the lower jaw, for cutting the grass, and molares for grinding it; in graminivorous animals, we see molares alone; and in carnivorous animals, canine teeth for catching at their prey, and incisores and molares for cutting and dividing it. But, as man is not designed to catch and kill his prey with his teeth, we observe that our canini are shaped differently from the fangs of beasts of prey, in whom we find them either longer than the rest of the teeth, or curved. The incisores likewise are sharper in those animals than in man. Nor are the molares in the human subject similar to the molares of carnivorous animals; they are flatter in man than in these animals; and, in the latter, we likewise find them sharper at the edges, more calculated to cut and tear the food, and by their greater strength, capable of breaking the bones of animals. From these circumstances, therefore, we may consider man as partaking of the nature of these different classes; as approaching more to the carnivorous than to the herbivorous tribe of animals; but upon the whole, formed for a mixed aliment, and fitted equally to live upon flesh and upon vegetables. Those philosophers, therefore, who would confine a man wholly to vegetable food, do not seem to have studied nature. As the molares are the last teeth that are formed, so they are usually the first that fall out; this would seem to prove, that we require the same kind of aliment in old age as in infancy. Besides the use of the teeth in mastication, they likewise serve a secondary purpose, by assisting in the articulation of the voice.

Teething. See *Dentition* and *Teeth.*

Te'gula hibe'rnica. See *Lapis Hibernicus.*

TEGUMENTS, COMMON. Under this term anatomists comprehend the cuticle, rete mucosum, skin, and adipose membrane as being the covering to every part of the body except the nails. See *Skin.*

TE'LA. A web of cloth. The cellular membrane is so called from its likeness to a fine web.

TE'LA CELLULO'SA. See *Cellular membrane.*

Tele'phium. (Because it heals old ulcers, such as that of Telephus, made by Ulysses.) See *Sedum telephium.*

TELLU'RIUM. A very scarce metal of a tin white colour, and a high metallic lustre, found in nature alloyed with gold, silver, and lead, in the aurum paradoxicum and sylvanite.

TEMPERAME'NTUM. (From *tempero*, to mix together.) The peculiar constitution of the humours. Temperaments have been variously distinguished: the division most generally received is into the sanguineous, phlegmatic, choleric, and melancholic.

TEMPLE. The lateral and flat parts of the head above the ears.

TEMPORA'LIS ARTE'RIA. The temporal artery. A branch of the external carotid, which runs on the temples and gives off the frontal artery.

TEMPORAL BONES. *Ossa temporalia. Ossa temporum.* These two bones, which are situated one on each side of the head, are of a very irregular figure. They are usually divided into two parts, one of which, from the manner of its connection with the neighbouring bones, is called *os squamosum*, and the other *os petrosum*, from its irregularity and hardness.

In both these parts there are processes and cavities to be described. Externally there are three processes; one anterior, called *zygomatic* process, which is stretched forwards to join with the os malæ, and thus forms the bony jugum under which the temporal muscle passes; one posterior, called the *mastoid* or *mamillary* process, from its resemblance to a nipple; and one inferior, called the *styloid* process, from its shape, which is said to resemble that of the antient *stylus scriptorius.* In young subjects this process is united with the bone by an intermediate cartilage, which sometimes, even in adults, is not completely ossified. Three muscles have their origin from this process, and borrow half of their names from it, viz. stylo-glossus, stylo-hyoideus, and stylo-pharyngeus. Round the root of this process there is a particular rising of the os petrosum, which some writers describe as a process, and, from its appearance with the styloid, have named it *vaginalis*, others describe the semi-circular ridge of the meatus auditorius externus as a fifth process, to which they give the name of *auditory.* The depressions and cavities are, 1. A large fossa, which serves for the articulation of the lower-jaw; it is situated between the zygomatic auditory, and vaginal processes, and is separated in its middle by a fissure into which the ligament that secures the articulation of the lower-jaw with this bone is fixed. The fore-part of this cavity, which receives the condyle of the jaw, is covered with cartilage; the back part only with the periosteum. 2. A long fossa behind the mastoid process, where the digastric muscle has its origin. 3. The *meatus auditorius externus*, the name given to a large funnel-like canal that leads to the organ of hearing. 4. The *stylo-mastoid hole*, so called from its situation between the styloid and mastoid processes. It is likewise called the aqueduct of Fallopius, and affords a passage to the portio dura of the auditory or seventh pair of nerves. 5. Below and on the fore-part of the last foramen we observe part of the jugular fossa, a thimble-like cavity, in which the beginning of the internal jugular vein is lodged. 6. Before, and a little above this fossa is the orifice of a foramen, through which pass the internal carotid artery and two filaments of the intercostal nerve. This conduit runs first upward and then forward, forming a kind of elbow, and terminates at the end of the os petrosum. 7. At this part of the ossa temporum we observe the orifice of a canal which runs outwards and backwards in an horizontal direction, till it terminates in the cavity of the ear called tympanum. This canal, which in the recent subject is continued from the ear to the mouth, is called the *Eustachian tube.* 8. A small hole behind the mastoid process, which serves for the transmission of a vein to the lateral sinus. But this, like other foramina in the skull that serve only for the transmission of vessels, is neither uniform in its situation, nor to be met with in every subject. The internal surface of these bones may easily be divided into three parts. The first, uppermost and largest, is the squamous part, which is slightly concave from the impression of the brain. Its semi-circular edge is sloping, so that the external lamella of the bone advances farther than the internal, and thus rests more securely on the parietal bones. The second and middlemost, which is the petrous part of the bone, forms a hard, craggy protuberance, nearly of a triangular shape. On its posterior side we observe a large foramen, which is the meatus auditorius internus; it receives the double nerve of the seventh pair, viz. the portio dura and portio mollis of that pair. About the middle of its anterior surface is a small foramen, which opens into the aqueduct of Fallopius, and receives a twig of the portio dura of the seventh pair of nerves. This foramen having been first described by Fallopius, and by him named *hiatus*, is sometimes called *hiatus Fallopii*. Besides these, we observe other smaller holes for the transmission of blood-vessels and nerves. Below this craggy protuberance is the third part, which, from its shape and connection with the os occipitis by means of the lambdoidal suture, may be called the lambdoidal angle of the temporal bone. It is concave from the impression of the brain; it helps to form the posterior and inferior fossæ of the skull, and has a considerable furrow, in which is lodged part of the lateral sinus. The temporal bones differ a little in their structure from the other bones of the cranium. At their upper parts they are very thin, and almost without diploë, but below they have great strength and thickness. In the fœtus, the thin upper part, and the lower craggy part, are separated by a cartilaginous substance; there is no appearance either of the mastoid or styloid processes, and, instead of a long funnel-like meatus auditorius externus, there is only a smooth bony ring, within which the membrana tympani is fastened. Within the petrous part of these bones there are several cavities, processes, and bones, which belong altogether to the ear, do not enter into the formation of the cranium, and are described under the article Ear. The ossa temporum are connected by suture with the ossa parietalia, the os occipitis, the ossa malarum, and the os sphenoides, and are articulated with the lower-jaw.

TEMPORA'LIS. (*Temporalis*, sc. *musculus.*) *Arcardi-temporo-maxillaire*, of Dumas. This muscle, which Winslow has named the *crotaphites*, arises fleshy from the lower, lateral, and anterior part of the parietal bone; from all the squamous portion of the temporal bone; from the lower and lateral part of the os frontis; from the posterior surface of the os malæ; from all the temporal process of the sphenoid bone; and sometimes from a ridge at the lower part of this process. This latter portion, however, is often common to this muscle and the pterygoideus externus. It is of a semicircular shape, and its radiated fibres converge, so as to form a strong middle tendon, which passes under the jugum, and is inserted into the coronoid process of the lower jaw, to which it adheres on every side, but more particularly at its fore-part, where the insertion is continued down to the body of the bone. This muscle is covered by a pretty strong fascia, which some writers have erroneously described as a part of the aponeurosis of the occipito-frontalis. This fascia adheres to the bones, round the whole circumference of the origin of the muscle, and, descending over it, is fixed below to the ridge where the zygomatic process begins, just above the meatus auditorius, to the upper edge of the zygomatic process itself, and anteriorly to the os malæ. This fascia serves as a defence to the muscle, and likewise gives origin to some of its fleshy fibres. The principal use of the temporal muscle is to draw the lower jaw upwards, as in the action of biting; and as it passes a little forwards to its insertion, it may at the same time pull the condyle a little backwards, though not so much as it would have done if its fibres had passed in a direct line from their origin to their insertion, because the posterior and lower part of the muscle passes over the root of the zygomatic process, as over a pulley.

TE'NDO ACHI'LLIS. See *Achillis tendo.*

TENDON. (*Tendon*, from *tendo*, to stretch.) The white and glistening extremity of a muscle. See *Muscle.*

TENE'SMUS. (From τεινω, to constringe; so called from the perception of a continual constriction or bound state of the part.) A continual inclination to go to stool, without a discharge.

TE'NSOR. (From *tendo*, to stretch.) A muscle whose office is to extend the part to which it is fixed.

TE'NSOR PA'LATI. See *Circumflexus.*

TE'NSOR TY'MPANI. *Internus auris*, of Douglas and Cowper. *Internus mallei*, of Winslow, and *salpingo-malleen*, of Dumas. A muscle of the ear, which pulls the malleus and the membrane of the tympanum towards the petrous portion of the temporal bone, by which the membrana tympani is made more concave and tense.

TE'NSOR VAGI'NÆ FE'MORIS. *Fascialis. Membranosus*, of Douglas. *Membranus vel fascia lata*, of Cowper, and *Ilio aponeurosi-femoral*, of Dumas. *Musculus aponeurosis*, vel *fasciæ latæ*, of Winslow. A muscle, situated on the outside of the thigh, which stretches the membranous fascia of the thigh, assists in the abduction of the thigh, and somewhat in its rotation inwards. It arises by a narrow, tendinous, and fleshy beginning from the external part of the anterior, superior, spinous process of the ilium, and is inserted a little below the great trochanter into the membranous fascia.

TENT. A roll of lint for dilating openings, sinuses, &c. See *Spongia præparata.*

TENTO′RIUM. A process of the dura mater, separating the cerebrum from the cerebellum. It extends from the internal horizontal spine of the occipital bone, directly forwards to the sella turcica of the sphenoid bone.

Terebe′lla. (Dim. of *terebra*, a piercer or gimblet.) A trepan or instrument for sawing out circular portions of the skull. A trephine.

TEREBI′NTHINA. (From τερεϐινθος, the turpentine-tree.) Turpentine, the produce of pine-trees.

Terebi′nthina argentorate′nsis. Strasburg turpentine. This species is generally more transparent and less tenacious than either the Venice or Chio turpentines. It is of a yellowish brown colour, and of a more agreeable smell than any of the turpentines, except the Chio. It is extracted in several parts of Germany, from the red and silver fir, by cutting out, successively, narrow strips of the bark. In some places a resinous juice is collected from under the bark called *Lachryma abiegna*, and *oleum abietinum.*

Terebi′nthina canade′nsis. Canada turpentine. A production of the *pinus balsamea;* which see.

Terebi′nthina chi′a. Cyprus turpentine. The resin obtained from the *pistacia terebinthus;* which see.

Terebi′nthina commu′nis. See *Pinus sylvestris.*

Terebi′nthina cy′pria. See *Pistacia terebinthus.*

Terebi′nthina vene′ta. Venice turpentine; so called because we are supplied with it from the Venetians. See *Pinus larix.*

Terebi′nthina vulga′ris. Common turpentine. The liquid resin of the pinus sylvestris. See *Turpentine.*

Terebi′nthinæ o′leum. The oil distilled from the liquid resin of the pinus sylvestris.

TE′RES. Round, smooth. 1. The name of some muscles and ligaments.

2. The name of the ascaris lumbricoides, or round worm, which infests the intestines. See *Worms.*

Te′res ligame′ntum. The ligament at the bottom of the socket of the hip joint.

TE′RES MA′JOR. (*Teres*, sc. *Musculus major. Teres*, round, smooth.) Riolanus, who was the first that distinguished this and the other muscles of the scapula by particular appellations, gave the name of *teres* to this and the following muscle, on account of their long and round shape. *Anguli-scapulo-humeral*, of Dumas. This muscle, which is longer and thicker than the teres minor, is situated along the inferior costa of the scapula, and is in part covered by the deltoides.

It arises fleshy from the outer surface of the inferior angle of the scapula, (where it covers some part of the infra spinatus and teres minor, with both which its fibres intermix,) and likewise from the lower and posterior half of the inferior costa of the scapula. Ascending obliquely towards the os humeri, it passes under the long head of the triceps brachii, and then becomes thinner and flatter to form a thin tendon of about an inch in breadth, and somewhat more in length, which runs immediately behind that of the latissimus dorsi, and is inserted along with it into the ridge at the inner side of the groove that lodges the long head of the biceps. These two tendons are included in a common capsula, besides which the tendon of this muscle heres to the os humeri, by two other capsulæ which we find placed one above the other.

This muscle assists in the rotatory motion of the arm, and likewise in drawing it downwards and backwards; so that we may consider it as the congener of the latissimus dorsi.

TE′RES MIN′OR. *Marginisus-scapulo-trochiterien*, of Dumas. This muscle seems to have been first described by Fallopius. The teres minor is a thin fleshy muscle, situated along the inferior edge of the infra-spinatus, and is in part covered by the posterior part of the deltoides.

It arises fleshy from all the convex edge of the inferior costa of the scapula; from thence it ascends obliquely upwards and forwards, and terminates in a flat tendon, which adheres to the lower and posterior part of the capsular ligament of the joint, and is inserted into the lower part of the great tuberosity of the os humeri, a little below the termination of the infra-spinatus.

The tendinous membrane, which is continued from the infra-spinatus, and spread over the teres minor, likewise forms a thin septum between the two muscles. In some subjects, however, they are so closely united, as to be with difficulty separated from each other. Some of the fibres of the teres minor are intermixed with those of the teres major and subscapularis.

The uses of this muscle are similar to those of the infra-spinatus.

TE′RETRUM. (From τερεω, to pierce.) The trepan.

Termina′lia be′nzoin. The Benjamin gum-tree.

Termi′nthus. (From τερμινθος, the turpentine-tree.) *Albatis.* Black and ardent pustules, mostly attacking the legs females; so called from their resemblance to the fruit of the turpentine-tree.

Ternary. Consisting of the number three, which some chemical and mystical writers have made strange work with; but the most remarkable distinction of this kind, and the only one worth notice, is that of Hippocrates, who divides the parts of a human body into continentes, contenta, and impetum facientes, though the latter is resolvable into the mechanism of the two former, rather than any thing distinct in itself.

TE′RRA. Earth, as distinguished from minerals and metals and precious stones.

Te′rra cario′sa. Rotten bone, a species of non-effervescent chalk, of a brown colour.

Te′rra ca′techu. See *Acacia catechu.*

Te′rra damna′ta. *Terra mortua.* Condemned earth is the remainder, after some distillations, where all that will rise is drawn off; the same as *Caput mortuum.*

Te′rra folia′ta ta′rtari. The acetate of potash.

Te′rra Japo′nica. *Japan earth. Cachou. Faufel. Cætchu. Caschu. Catechu. Cadtchu. Cashow. Caitchu. Castjoe. Cachu. Cate. Kaath.* The natives call it *Cutt,* the English who reside there *Cutch.* It was called *Japan earth,* because it was long supposed to be an earthy substance from Japan. It is the inspissated juice of a species of *acacia,* which grows in great abundance in the kingdom of Bahar, prepared from a decoction of the inner part of the wood. From the negligent method in which it is dried in little kilns dug for that purpose, it acquires the earthly appearance it in general has, from which circumstance it takes its name. In the kingdom of Bahar, besides being much used in medicine, it is employed for many purposes in arts, particularly for painting the beams of houses, to defend them from vermin. See *Acacia catechu.*

Te′rra Le′mnia. Earth of Lemnos. See *Bole.*

Te′rra Livo′nica. See *Bole.*

Te′rra mari′ta. The curcuma or turmeric root is sometimes so called.

Te′rra mo′rtua. See *Terra damnata.*

Te′rra pondero′sa sali′ta. See *Murias barytæ.*

Te′rra sigilla′ta. See *Bole.*

Te′rræ o′leum. See *Petroleum.*

Te′rrea absorbe′ntia. Absorbent earths, distinguishable from other earthy and stony substances by their solubility in acids, as chalk, crabs' claws, oyster-shells, egg-shells, pearl, coral, &c.

Te′rthra. (From τερθρον, a crane.) The middle and lateral parts of the neck.

Tertian ague. See *Febris intermittens.*

Tertia′na du′plex. A tertian fever that returns every day; but the paroxysms are unequal, every other fit being alike.

Tertia′na duplica′ta. A tertian fever returning every other day; but there are two paroxysms, in one day.

Tertia′na fe′bris. See *Febris intermittens.*

Te′rtiana tri′plex. A tertian fever returning every day, every other day there are two paroxysms, and but one in the intermediate one.

Tertiana′ria. (From *tertiana,* a species of intermittent fever which is said to be cured by this plant.) The plant which is thus called in some pharmacopœias is the *Scutellaria galericulata;* which see.

Te′rtium sal. (From *tertius,* third.) A neutral salt as being the product of an acid and an alkali, making a third body different from either.

Te′ssera. (From τεσσαρα, four.) A four-square bone. The cuboid bone.

Te′sta proba′trix. (*Quasi tosta,* from *torreo,* to burn.) A cupel or test. A pot for separating baser metals from gold and silver.

Testa′do. (From *testa,* a shell; because it is covered with a shell.) A tortoise, a snail. An ulcer, which, like a snail, creeps under the skin.

Te′stæ. Oyster-shells.

Te′stæ præpara′tæ. "Wash the shells previously cleared of dirt, with boiling water, then prepare them as is directed with chalk."

Te′stes ce′rebri. See *Tubercula quadrigemina.*

TESTICLE. *Testis. Orchis.* They are also called *didymi,* and by some *perin.* Two little oval bodies situated within the scrotum, and covered by a strong, white, and dense coat, called tunica albuginea testis. Each testicle is composed of small vessels, bent in a serpentine direction, arising from the spermatic artery, and convoluted into little heaps, separated from one another by cellular partitions. In each partition there is a duct receiving semen from the small vessels; and all the ducts constitute a net which is attached to the tunica albuginea. From this net-work twenty or more vessels arise, all of which are variously contorted, and, being reflected, ascend to the posterior margin of the testis, where they unite into one common duct, bent into serpentine windings, and forming a hard body called the *epididymis.* The spermatic arteries are branches of the aorta. The spermatic veins empty themselves into the vena cava and emulgent vein. The nerves of the testicle are branches of the lumbar and great intercostal nerve. The use of the testicle is to secrete the semen.

Testicle, swelled. See *Hernia humoralis.*

Testi′culus. (*Testiculus,* dim. of *testis.*) A small testicle. Also the *orchis* plant, so named from the resemblance of its roots to a testicle.

Testi′culus cani′nus. See *Orchis mascula.*

TE′STIS. (A witness, the testes being the witnesses of our manhood.) See *Testicle.*

Tetano′mata. (From τετανοω, to smooth.)

Tetanothra. Medicines which smooth the skin, and remove wrinkles.

TE'TANUS. (From τεινω, to stretch.) Spasm with rigidity. *Convulsio indica. Holotonicos. Rigor nervosus.* A genus of disease in the Class, *Neuroses,* and Order, *Spasmi,* of Cullen; characterised by a spasmodic rigidity of almost the whole body. The varieties of tetanus are, 1. *Opisthotonos,* where the body is thrown back by spasmodic contractions of the muscles. 2. *Emprosthotonos,* the body being bent forwards. 3. *Trismus,* the locked jaw. Tetanus is often symptomatic of syphilis and worms.

These affections arise more frequently in warm climates than in cold ones, and are very apt to occur when much rain or moisture quickly succeeds excessively dry and sultry weather. They attack persons of all ages, sexes, temperaments, and complexions, but the male sex more frequently than the female, and those of a robust and vigorous constitution than those of a weak habit. An idea is entertained by many, Dr. Thomas observes, that negroes are more predisposed to attacks of tetanus than white people; they certainly are more frequently affected with it, but this circumstance does not arise from any constitutional pre-disposition, but from their being more exposed to punctures and wounds in the feet, by nails, splinters of wood, pieces of broken glass, &c. from usually going bare-footed.

Tetanic affections are occasioned either by exposure to cold, or by some irritation of the nerves, in consequence of local injury by puncture, incision, or laceration. Lacerated wounds of tendinous parts prove, in warm climates, a never-failing source of these complaints. In cold climates, as well as in warm ones, the locked jaw, or trismus, frequently arises in consequence of the amputation of a limb.

When the disease has arisen in consequence of a puncture, or any other external injury, the symptoms show themselves generally about the eighth day, but when it proceeds from an exposure to cold, they generally make their appearance much sooner.

In some instances it comes on suddenly, and with great violence; but it more usually makes its attack in a gradual manner; in which case, a slight stiffness is at first perceived in the back part of the neck, which, after a short time, becomes considerably increased, and at length renders the motion of the head both difficult and painful.

With the rigidity of the head there is likewise an uneasy sensation at the root of the tongue, together with some difficulty in swallowing, and a great tightness is perceived about the chest, with a pain at the extremity of the sternum, shooting into the back. A stiffness also takes place in the jaws, which soon increases to such a height, that the teeth become so closely set together as not to admit of the smallest opening. This is what is termed the locked jaw.

In some cases, the spasmodic affection extends no further. In others the spasms at this stage of the disease, returning with great frequency become likewise more general, and now affect not only the muscles of the neck and jaws, but likewise those of the whole spine, so as to bend the trunk of the body very forcibly backwards, and this is what is named opsithotonos. Where the body is bent forwards the disease is called emprosthonotos.

During the whole course of the disorder, the abdominal muscles are violently affected with spasm, so that the belly is strongly retracted, and feels very hard, most obstinate costiveness prevails, and both the flexor and extensor muscles of the lower extremities are commonly affected at the same time, so as to keep the limbs rigidly extended.

The flexors of the head and trunk become at length so strongly affected, as to balance the action of the extensor, and to keep the head and trunk so rigidly extended and straight as to render it incapable of being moved in any direction. The arms, which were little affected before, are now likewise rigidly extended, the tongue also becomes affected with spasm, and being convulsively darted out, is often much injured by the teeth at that moment snapping together. It is to this state of the disease that the term tetanus has been strictly applied.

The disorder continuing to advance, every organ of voluntary motion becomes affected; the eyes are rigid and immoveable in their sockets, the countenance is hideously distorted, and expresses great distress; the strength is exhausted, the pulse becomes irregular, and one universal spasm puts a period to a most miserable state of existence.

Attacks of tetanus are seldom attended with any fever, but always with violent pain, and the spasms do not continue for a constancy, but the muscles admit of some remission in their contraction, which is renewed every ten or fifteen minutes, especially if the patient makes the least attempt to speak, drink, or alter his position.

When tetanic affections arise in consequence of a wound, puncture, or laceration, in warm climates, Dr. Thomas observes, they are almost sure to prove fatal. The locked jaw in consequence of an amputation, likewise proves usually fatal. When these affections are produced by an exposure to cold, they may in most cases be removed by a timely use of proper remedies, although a considerable space will probably elapse before the patient will be able to recover his former strength.

On dissections of this disease, slight effusions within the cranium have been observed in a few instances: but in by far the greater number, nothing particular has been discovered, either in the brain, or any other organ.

The general indications are, 1. To remove any local irritation, which may appear to have excited the disease; 2. To lessen the general irritabilility, and spasmodic tendency; 3. To restore the tone of the system.—If a thorn, or other extraneous substance, be lodged in any part, it must be extracted; any spicula of bone, which may have brought on the disease after amputation, should be removed; a punctured wound ought to be dilated; &c. Some have proposed dividing the nerve going to the part, or even amputating this, to cut off the irritation; others paralysing the nerves by powerful sedatives or destroying them by caustics; others again exciting a new action in the part by active stimulants; but the efficacy, and even propriety of such measures, is doubtful. To fulfil the second indication various means have been proposed. The abstraction of blood, recommended by Dr. Rush, might perhaps appear advisable in a vigorous plethoric habit in the beginning of the disease, but it has generally proved of little utility, or even hurtful, and is rather contra-indicated by the state of the blood. Purging is a less questionable measure, as costiveness generally attends the disease, and in many cases it has appeared very beneficial, especially when calomel was employed. It has been found also, that a salivation, induced by mercury, has sometimes greatly relieved the disorder; but in other instances it has failed altogether. The remedy, which has been oftenest employed, and with the most decided advantage, is opium, and sometimes prodigious quantities of it have been exhibited; indeed small doses are useless, and even large ones have only a temporary effect, so that they must be repeated, as the violence of the symptoms is renewed; and where the patient cannot swallow, it may be tried in glyster, or freely rubbed into the skin. Other sedative and antispasmodic remedies, have been occasionally resorted to, as hemlock, tobacco, musk, camphor, &c. but for the most part with less satisfactory results. The warm bath has sometimes proved a useful auxiliary in cold climates; but the cold bath is much more relied upon, especially in the West Indies, usually in conjunction with the liberal use of opium. In Germany, alkaline baths, and the internal use of the same remedies, are stated to have been decidedly serviceable. Others have advised the large use of bark and wine, which seem, however, rather calculated to be preventives, or to fulfil the third indication; yet wine may be employed rather as nourishment, since in severe cases of the disease little else can be taken. Electricity seems too hazardous a remedy to be tried in a general affection, especially in the muscles of respiration; but if confined to the jaw, it may be useful in a mild form. At the period of convalescence the strength must be restored by suitable diet and medicines, the cold bath, regular exercise, &c.: and removing the patient from the West Indies to a colder climate, till the health is fully established would be a very proper precaution.

Tetartæ'us. (Τεταρταιος, fourth.) A quartan fever.

Tetramy'rum. (From τετρας, four, and μυρον, an ointment.) An ointment of four ingredients.

Tetrangu'ria. (From τετρας, four, and αγγος, a cup; so called because its fruit resembles a cup divided into four parts.) The citrul.

Tetrapha'rmacum. (From τετρας, four, and φαρμακον, a drug.) A medicine composed of four ingredients.

Tetters. See *Herpes.*

TEU'CRIUM. (From *Teucer*, who discovered it.) The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.* The herb speedwell.

Teu'crium capita'tum. The systematic name of the poley mountain of Montpellier. *Polium montanum.* This plant, *Teucrium capitatum*, of Linnæus, bears the winter of our climate, and is generally substituted for the candy-species.

Teu'crium chamæ'drys. The systematic name of the common germander. *Chamædrys. Chamædrys minor repens, vulgaris. Quercula calamandrina. Trissago. Chamædrops*, of Paulus Ægineta, and Oribasius. This plant, creeping germander, small germander, and English treacle; *Teucrium; foliis cuneiformi-ovatis, incisis, crenatis, petiolatis; floribus ternis; caulibus procumbentibus, subpilosis*, of Linnæus, has a moderately bitter and somewhat aromatic taste. It was in high repute amongst the antients in intermittent fevers, rheumatism, and gout; and where an aromatic bitter is wanting, germander may be administered with success. The best time for gathering this herb is when the seeds are formed, and the tops are then preferable to the leaves. When dry, the dose is from ʒss to ʒj. Either water or spirit will extract their virtue; but the watery infusion is more bitter. This plant is an ingredient in the once celebrated powder called from the Duke of Portland.

Teu'crium chamæ'pitys. The systematic name of the ground pine. *Chamæpitys. Arthetica. Arthretica. Ajuga. Abiga. Iva arthritica. Holocyron. Ionia. Sideritis.* Common ground-pine. This low hairy plant, *Teucrium; foliis trifidis, linearibus, integerrimis; floribus sessilibus, lateralibus, solitariis; caule diffuso*, of Linnæus, has a moderately bitter taste, and a resinous, not disagreeable smell, somewhat like that of the pine. The tops or leaves are recommended as aperients and corroborants of the nervous system, and said to be particularly serviceable in female obstructions and paralytic disorders.

Teu′crium cre′ticum. The systematic name of the poley mountain of Candy. *Polium creticum* The tops and whole herb enter the antiquated compounds *mithridate* and *theriaca*. The plant is obtained from the island of Candy; has a moderately aromatic smell, and a nauseous bitter taste. It is placed amongst the aperients and corroborants.

Teu′crium iva. *Chamæpitys moschata. Iva moschata monspeliensium. Chamæpitys anthyllus.* The *Teucrium iva*, of Linnæus. French ground-pine. It is weaker, but of similar virtues to chamæpitys.

Teu′crium ma′rum. The systematic name of the Syrian herb mastich. *Marum Syriacum. Marum creticum. Majorana Syriaca. Marum verum. Marum Cortusi. Chæmedrys incana maritima.* Marum germander, or Syrian herb mastich. This shrub is the *Teucrium; foliis integerrimis ovatis acutis petiolatis, subtus tomentosis; floribus racemosis secundis*, of Linnæus. It grows plentifully in Greece, Ægypt, Crete, and Syria. The leaves and younger branches, when recent, on being rubbed betwixt the fingers, emit a volatile aromatic smell, which readily excites sneezing; to the taste they are bitterish, accompanied with a sensation of heat and acrimony. Judging from these sensible qualities of the plant, it may be supposed to possess very active powers. It is recommended as a stimulant aromatic, and deobstruent; and Linnæus, Rosenstein, and Bergius, speak highly of its utility. Dose, ten grains to half a drachm of the powdered leaves, given in wine. At present, however, marum is chiefly used as an errhine.

Teu′crium monta′num. The systematic name of the common poley mountain.

Teu′crium po′lium. The systematic name of the golden poley mountain.

Teu′crium sco′rdium. The systematic name of the water germander. *Scordium. Trissago palustris. Chamædrys palustris allium redolens.* Water germander. The leaves of this plant have a smell somewhat of the garlic kind, from which circumstance it is supposed to take its name: to the taste they are bitterish and slightly pungent. The plant was formerly in high estimation, but is now justly fallen into disuse, although recommended by some in antiseptic cataplasms and fomentations.

Teu′thrum. (Τευθρον.) The herb polium.

THA′LAMI NERVO′RUM OPTICO′RUM. (Θαλαμος, a bed.) Two bodies, which form in part the optic nerve, placed near to each other, in appearance white, protruding at the base of the lateral ventricles, and running in their direction inwards, a little downwards, and upwards.

Thalasso′meli. (From θαλασσα, the sea, and μελι, honey.) A medicine composed of sea-water and honey.

THALI′CTRUM. (From θαλλω, to flourish.)

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria*. Order, *Polygynia*.

2. The pharmacopœial name of the poor man's rhubarb.

Thali′ctrum fla′vum. The systematic name of the poor man's rhubarb. The root of this plant is said to be aperient and stomachic, and to come very near in its virtues to rhubarb. It is a common plant in this country, but seldom used medicinally.

Tha′psia. (From *Thapsus*, the island where it was found.) The deadly carrot. *Thapsia asclepias*, of Linnæus. The root operates violently both upwards and downwards, and is not used in the present practice.

Tha′psus. (From the island *Thapsus*.) The great white mullein, or cows lungwort.

THE′A. Tea. There are two species of this tree; viz. 1. The bohea, or black tea; and 2. The viridis, or green tea; both of which are natives of China or Japan where they attain the height of five or fix feet.

Great pains are taken in collecting the leaves *singly*, at three different times, viz. about the middle of February, in the beginning of March, and in April. Although some writers assert, that they are first exposed to the steam of boiling water, and then dried on copper-plates; yet it is now understood that such leaves are simply dried on *iron* plates, suspended over a fire, till they become dry and shrivelled; when cool, they are packed in tin boxes to exclude the air, and in that state exported to Europe.

Teas are divided in Britain into three kinds of *green*, and five of *bohea*. The former class includes, 1. *Imperial* or *bloom tea*, having a large leaf, a faint smell, and being of a light green colour. 2. *Hyson*, which has small curled leaves, of a green shade inclining to blue. 3. *Singlo* tea, thus termed from the place where it is cultivated. The boheas comprehend: 1. *Souchong*, which, on infusion, imparts a yellowish green colour. 2. *Camho*, a fine tea, emitting a fragrant violet smell, and yielding a pale shade; it receives its name from the province where it is reared. 3. *Pekoe tea* is known by the small white flowers that are mixed with it. 4. *Congo* has a larger leaf than the preceding variety, and yields a deeper tint to water; and 5. Common bohea, the leaves of which are of an uniform green colour. There are besides other kinds of tea, sold under the names of *gunpowder tea*, &c. which differ from the preceding, only in the minuteness of their leaves, and being dried with additional care.

Much has been said and written on the medicinal properties of tea; in its natural state it is a *narcotic* plant, on which account the Chinese refrain from its use till it has been divested of this property by keeping it at least for twelve months. If, however, good tea be drunk in moderate quantities, with sufficient milk and sugar, it invigorates the system, and produces a temporary exhilaration; but when taken too copiously, it is apt to occasion weakness, tremor, palsies, and various other symptoms arising from narcotic plants, while it contributes to aggravate hysterical and hypochondriacal complaints. Tea has also been supposed to possess considerable diuretic and sudorific virtues, which, however, depend more on the *quantity* of warm water employed as a vehicle, than the quality of the tea itself. Lastly, as infusions of these leaves are the safest refreshment after undergoing great bodily fatigue or mental exertion; they afford an agreeable beverage to those who are exposed to cold weather; at the same time tending to support and promote perspiration, which is otherwise liable to be impeded.

The′a Germa′nica. Fluellin; male speedwell. See *Veronica*.

Theba′ica. (A *Thebaide regione*, from the country about the antient city of Thebes in Egypt, where it flourished.) The Egyptian poppy.

THEBE′SII FORA′MINA. The orifices of veins in the cavities of the heart.

THE′CA VERTEBRA′LIS. (*Theca*, from τιθημι, to place.) The vertebral canal.

Thely′pteris. (From θηλυς, female, and πτερις, fern.) The female fern.

The′nar. (*Thenar*, sc. *musculus*.) See *Flexor brevis pollicis manus*.

Theobro′ma caca′o. (*Theobroma*, from θεοι, the gods, and βρωμα, food; so called from the deliciousness of its fruit: *Cacao*, an Indian term.) The systematic name of the tree which affords cocoa and chocolate.

Theodo′ricum. (From θεοι, the gods, and δωρον, a gift.) The pompous name of some antidotes.

THERAPEI′A. (From θεραπευω, to heal.) *Therapia*. The art of healing diseases.

THERAPEUTICS. (*Therapeutica*, from θεραπευω, to cure.) *Therapia*. *Methodus medendi*. That branch of medicine which treats of the operation of the different means employed for curing diseases, and of the application of these means.

Theri′aca. (From θηρ, a viper or venomous wild beast.) Treacle, or molasses: also a medicine appropriated to the cure of the bites of venomous animals, or to resist poisons.

Theri′aca andro′machi. The Venice or Mithridate treacle; a composition of sixty-one ingredients, prepared, pulverized, and with honey formed into an electuary.

Theri′aca cœle′stis. Liquid laudanum.

Theri′aca commu′nis. Common treacle, or molasses.

The′riaca damo′cratis. An old preparation usually called Confectio Damocratis.

Theri′aca Edine′nsis. Edinburgh theriaca. The thebaic electuary.

Theri′aca Germano′rum. A rob of juniper-berries.

Theri′aca Londine′nsis. A cataplasm of cummin seed, bay-berries, germander, snake-root, cloves, and honey.

Theri′aca rustico′rum. The roots of the common garlic were so called. See *Allium*.

Therio′ma. (From θηριοω, to rage like a wild beast.) A malignant ulcer.

The′rmæ. Warm baths or springs. See *Mineral waters*.

THERMOMETER. (*Thermometrum*, from θερμη, heat, and μετρον, a measure.) An instrument for measuring the degrees of heat. See *Caloric*.

Thigh-bone. See *Femur*.

THIRST. *Sitis*. The sensation by which we experience a desire to drink. The seat of this sensation appears to be either in the fauces or the stomach.

Thistle, carline. See *Carlina acaulis*.

Thistle, holy. See *Centaurea benedicta*.

Thistle, pine. See *Carlina gummifera*.

THLA′SPI. (From θλαω, to break, because its seed appears as if it were broken or bruised.)

1. The name of a genus of plants in the Linnæan system. Class, *Tetradynamia*. Order, *Siliculosa*.

2. The pharmaceutical name of the herb penny-cress. Two species of thlaspi are directed in some pharmacœpias for medicinal uses;—the *Thlaspi arvense*, of Linnæus, or treacle mustard, and *Thlaspi campestre*, of Linnæus, or mithridate mustard. The seeds of both have an acrid biting taste approaching to that of common mustard, with which they agree nearly in their pharmaceutic qualities. They have also an unpleasant flavour, somewhat of the garlic or onion kind.

Thla′spi arve′nse. The systematic name of the treacle mustard. See *Thlaspi*.

Thla′spi campe′stre. The systematic name of the mithridate mustard. See *Thlaspi*.

THORACIC DUCT. *Ductus thoracicus*. *Ductus Pecquettii*. The trunk of the absorbents; of a serpentine form, and about the diameter of a crow-quill. It lies upon the dorsal vertebræ, between the aorta and vena azygos, and extends from the posterior opening of the diaphragm to the angle formed by the union of the left subclavian and jugular veins, into which it opens and evacuates its contents. In this course the thoracic duct receives the absorbent vessels from almost every part of the body.

THORAX. (From ϑορεω, to leap, because in it the heart leaps.) The chest. That part of the body situated between the neck and the abdomen. The external parts of the thorax are, the common integuments, the breasts, various muscles, and the bones of the thorax. (See *Bone* and *Respiration.*) The parts within the cavity of the thorax are, the pleura and its productions, the lungs, heart, thymus gland, œsophagus, thoracic duct, arch of the aorta, part of the vena cava, the vena azygos, the eighth pair of nerves, and part of the great intercostal nerve.

Thorn, Ægyptian. The *Mimosa nilotica* of Linnæus. See *Acacia vera.*

Thorn-apple. See *Datura stramonium.*

Thorn, black. See *Prunus spinosa.*

THRO′MBUS. (From ϑροεω, to disturb.) A small tumour which sometimes arises after bleeding, from the blood escaping from the vein into the cellular structure surrounding it.

Thrush. See *Aphthæ.*

Thry′ptica. (From θρυπτω, to break.) Lithontriptics, medicines which are said to have the power of destroying stones in the bladder.

Thu′ris co′rtex. The cascarilla and eleutheria barks, were so called. See *Croton cascarilla.*

Thus. (From ϑυω, to sacrifice, so called from its great use in sacrifices.) See *Juniperus Lycia,* and *pinus abies.*

Thus judæo′rum. See *Thymiama.*

Thus ma′sculum. See *Juniperus lycia.*

THUY′A. (From θυον, odour, so named from its fragrant smell.) *Thuja.* The name of a genus of plants. Class, *Monoecia.* Order, *Monadelphia.*

Thuy′a occidenta′lis. The systematic name of the tree of life. *Thuya; strobilis lævibus; squamis obtusis,* of Linnæus. *Arbor vitæ.* The leaves and wood were formerly in high estimation as resolvents, sudorifics, and expectorants, and were given in phthisical affections, intermittent fevers, and dropsies.

Thylaci′tis. (From θυλακος, a seed-vessel, so called from its large head.) The white garden poppy.

Thy′mbra. (From θυμος, thyme; so named because it smells like thyme.) See *Satureja.*

Thy′mbra hispa′nica. The name given by Tournefort to the common herb mastich. See *Thymus mastichina.*

Thyme, lemon. See *Thymus serpyllum.*

Thyme, mother of. See *Thymus serpyllum.*

Thymelæ′a. (From θυμα, an odour, because of its smell.) See *Daphne gnidium.*

Thymia′ma. (From θυμα, an odour, so called from its odoriferous smell.) Musk-wood. *Thus judæorum.* A bark in small brownish gray pieces, intermixed with bits of leaves, seeming as if the bark and leaves had been bruised and pressed together, brought from Syria, Cilicia, &c. and supposed to be the produce of the liquid storax tree. This bark has an agreeable balsamic smell approaching to that of liquid storax, and a sub-acrid bitterish taste, accompanied with some slight adstringency.

Thy′mium. (From θυμος, thyme, because it is of the colour of thyme.) A small wart upon the skin.

Thymoxa′lme. (From θυμος, thyme, οξυς, acid, and αλς, salt.) A composition of thyme, vinegar, and salt.

THY′MUS. (Απο του ϑυμοω, because it was used in faintings; or from ϑυμα, an odour, because of its fragrant smell.)

1. The name of a genus of plants in the Linnæan system. Class, *Didynamia.* Order, *Gymnospermia.* Thyme.

2. The pharmacopœial name of the common thyme. See *Thymus vulgaris.*

3. A small indolent carnous tubercle like a wart arising about the anus, or the pudenda, resembling the flowers of thyme, from whence it takes its name.

4. (ϑυμος, the thymus gland.) A gland of considerable size in the fœtus, situated in the anterior duplicature or space of the mediastinum, under the superior part of the sternum. An excretory duct has not yet been detected, but lymphatic vessels have been seen going from it to the thoracic duct. Its use is unknown.

Thy′mus citra′tus. See *Thymus serpyllum.*

Thy′mus cre′ticus. The plant which bears this name in some pharmacopœias is the *Satureja capitata,* of Linnæus; which see.

Thy′mus masti′china. The systematic name of the common herb mastich. *Marum vulgare. Sampsuchus. Clinopodium mastichina gallorum. Thymbra hispanica. Jaca indica. Thymus mastichina,* of Linnæus. A low shrubby plant, a native of Spain, which is employed as an errhine. It has a strong agreeable smell, like mastich. Its virtues are similar to those of marum syriacum, but less powerful.

Thy′mus serpy′llum. The systematic name of the mother of thyme. *Serpyllum. Serpillum. Gilarum. Serpyllum vulgare minus.* Wild or mother of thyme. *Thymus: floribus capitatis, caulibus repentibus, foliis planis obtusis basi ciliatis,* of Linnæus. This plant has the same sensible qualities as those of the garden thyme, but has a milder and rather more grateful flavour. Lemon thyme, the *Serpyllum citratum,* is merely a variety of the *Thymus serpyllum,* of Linnæus. It is very pungent, and has a particularly grateful odour, approaching to that of lemons.

Thy′mus vulga′ris. The systematic name of the common thyme. This herb, the *Thymus: erectus foliis revolutis ovatis, floribus verticillato spicatis,* of Linnæus, has an agreeable aromatic smell, and a warm pungent taste. Its virtues are said to be resolvent, emmenagogue, tonic, and stomachic; yet there is no disease mentioned in which its use is particularly recommended by any writer on the materia medica.

THYRO. Names compounded with this word belong to muscles which are attached to the thyroid cartilage; as,

THYRO ARYTÆNOIDE′US. (*Musculus thyro-arytænoideus.*) A muscle situated about the glottis, which pulls the arytenoid cartilage forwards nearer to the middle of the thyroid, and consequently shortens and relaxes the ligament of the larynx.

THYRO-HYOIDE′US. (*Musculus thyro-hyoideus.*) A muscle, situated between the os hyoides and trunk, which pulls the os hyoides downwards, and the thyroid cartilage upwards.

Thyro-pharynge′us. See *Constrictor pharyngis inferior.*

Thyro-pharyngo-staphili′nus. See *Palato pharyngeus.*

Thyro-staphili′nus. See *Palato pharyngeus.*

THYROID CARTILAGE. (*Cartilago thyroidea,* from ϑυρεος, a shield, and ειδος, resemblance, from its supposed resemblance to a shield.) Scutiform cartilage. The cartilage which is placed perpendicular to the cricoid cartilages of the larynx, constituting the anterior, superior, and largest part of the larynx. It is harder and more prominent in men than in women, in whom it forms the *pomum adami.*

THYROID GLAND. *Glandula thyroidea.* A large gland situated upon the cricoid cartilage, trachea, and horns of the thyroid cartilage. It is uncertain whether it be conglobate or conglomerate. Its excretory duct has never been detected, and its use is not yet known.

TI′BIA. (*Tibia,* the hautboy, qu. *tubia,* from *tuba,* a tube; so called from its pipe-like shape.) *Focile majus; Arundo major; Fosilus;* and, from its resemblance to an old musical instrument. *Canna major; Canna-domestica cruris.* The largest bone of the leg. It is of a long, thick and triangular shape, and is situated on the internal part of the leg. Its upper extremity is large, and flattened at its summit, where we observe two articulating surfaces, a little concave, and separated from each other by an intermediate irregular protuberance. Of these two cavities, the internal one is deepest, and of an oblong shape, while the external one is rounded, and more superficial. Each of these, in the recent subject, is covered by a cartilage, which extends to the intermediate protuberance, where it terminates. These two little cavities receive the condyles of the os femoris, and the eminence between them is admitted into the cavity which is seen between the two condyles of that bone; so that this articulation affords a specimen of the complete ginglymus. Behind the intermediate protuberance, or tubercle, is a pretty deep depression, which serves for the attachment of a ligament, and likewise to separate the two cavities from each other. Under the edge of the external cavity is a circular flat surface, covered with cartilage, which serves for the articulation of the fibula; and at the fore-part of the bone is a considerable tuberosity of an inch and a half in length, to which the strong ligament of the rotula is fixed.

The body of the tibia is smaller than its extremities, and, being of a triangular shape, affords three surfaces. Of these, the external one is broad, and slightly hollowed by muscles above and below; the internal surface is broad and flat, and the posterior surface is narrower than the other two, and nearly cylindrical. This last has a slight ridge running obliquely across it, from the outer side of the upper end of the bone to about one-third of its length downwards. A little below this we observe a passage for the medullary vessels, which is pretty considerable, and slants obliquely downwards. Of the three angles which separate these surfaces, the anterior one, from its sharpness, is called the *spine,* or *shin.* This ridge is not strait, but describes a figure like an Italic *f*, turning first inwards, then outwards, and lastly inwards again. The external angle is more rounded, and serves for the attachment of the interosseous ligament; and the internal one is more rounded still by the pressure of muscles.

The tibia enlarges again a little at its lower extremity, and terminates in a pretty deep cavity, by which it is articulated with the uppermost bone of the foot. This cavity, in the recent subject, is lined with cartilage. Its internal side is formed into a considerable process, called *malleolus internus,* which, in its situation, resembles the styloid process of the radius. This process is broad, and of considerable thickness, and from it ligaments are extended to the foot. At its back part we find a groove, lined with a thin layer of cartilage, in which slide the tendons of the flexor digitorum longus, and of the tibialis posticus; and a little behind this is a smaller groove, for the tendon of the flexor longus pollicis. On the side opposite to the malleolus internus, the cavity is interrupted, and immediately above it is a rough triangular depression, which is furnished with cartilage, and receives the lower end of the fibula.

The whole of this lower extremity of the bone seems to be turned somewhat outwards, so that the malleolus internus is situated more forwards than the inner border of the upper extremity of the bone.

In the fœtus both ends of the tibia are cartilaginous, and become afterwards epiphyses.

TIBIAL ARTERIES. *Arteriæ tibiales.* The two principal branches of the popliteal artery: the one proceeds forwards, and is called the anterior tibial; the other backwards, and is called the posterior tibial; of which the external tibial, the fibular, the external and internal plantar, and the plantal arch, are branches.

TIBIA′LIS ANTI′CUS. (*Musculus tibialis anticus.*) *Tibio-sus-metatarsien*, of Dumas. A flexor muscle of the foot, situated on the leg, which bends the foot by drawing it upwards, and at the same time turns the toes inwards.

Tibia′lis gra′cilis. See *Plantaris.*

TIBIA′LIS POSTI′CUS. (*Musculus tibialis posticus.*) *Tibio-tarsien*, of Dumas. A flexor muscle of the foot, situated on the leg, which extends the foot, and turns the toes inwards.

TIC DOULOUREUX. A painful affection of the nerves, which mostly attacks the face, particularly that branch of the fifth pair, which comes out of the infra-orbitary foramen.

Ti′glia gra′na. See *Croton tiglium.*

TILBURY WATER. This is found at West Tilbury in Essex. It is an aperient and chalybeate now seldom used medicinally.

TI′LIA. (Πτελεα, *ulmus*, the elm-tree.)

1. The name of a genus of plants in the Linnæan system. Class, *Polyandria.* Order, *Monogynia.*

2. The pharmacopœial name of the lime, or linden-tree.

Ti′lia europæ′a. The systematic name of the lime-tree. The flowers of this tree are supposed to possess anodyne and antispasmodic virtues. They have a moderately strong smell, in which their virtue seems to consist, and abound with a strong mucilage. They are in high esteem in France. See *Tilia.*

Ti′lli gra′na. See *Croton tiglium.*

Ti′lmus. (From τιλλω, to pluck.) Floccitatio or picking of bed-clothes, observable in the last stages of some disorders.

Timac. The name of a root imported from the East Indies, which is said to possess diuretic virtues, and therefore exhibited in dropsies. It is not known from what plant it is obtained.

TIN. *Stannum.* *Jupiter* of the alchemists. It has been much doubted whether this metal is found native. In the opinion of Kirwan there are sufficient authorities to determine the question in the affirmative. The *native oxyde of tin*, or *tin stone*, occurs both massive and crystallized. Its colour is a dark brown, sometimes yellowish grey. When crystallized, it is somewhat transparent. The *wood tin ore* is a variety of the native oxyde, termed so from its fibrous texture. This variety has hitherto been found only in Cornwall. It occurs in fragments which are generally round, and its colour is brown, sometimes inclining to yellow. Tin is also found mineralized by sulphur, associated always with a portion of copper, and often of iron. This ore is called *tin pyrites.* Its colour is yellowish grey. It has a metallic lustre, and a fibrous or lamellated texture; sometimes it exhibits prismatic colours. Tin is comparatively a rare metal, as it is not found in great quantity any where but in Cornwall or Devonshire; though it is likewise met with in the mines of Bohemia, Saxony, the island of Banca, the peninsula of Malacca, and in the East Indies.

Properties of Tin.—Tin is of a brilliant white colour, though not quite so white as silver. It is one of the lightest of the metals; its specific gravity, when hammered, being 7.299. It is very fusible, melting at about 442° Fahr. By intense heat it is volatilized. It becomes oxydized by a moderate degree of heat. It easily bends and emits a noise, called the crackling of tin. It is exceedingly soft and ductile. It may be reduced to very thin leaves. *Tin foil*, or tin leaf, which is tin beat out, is about one-thousandth part of an inch thick. It has scarcely any sound. Tin resists the action of the air. It crystallizes in rhombs formed of small octahedra. It unites, by fusion, with phosphorus and sulphur. It does not decompose water alone, or in the cold; but easily by means of many other bodies. It decomposes the sulphuric acid, and unites with the sulphurous acid. It decomposes the nitric acid, and is very soluble in muriatic acid. Nitromuriatic acid acts on it very readily. It is slightly soluble in the fluoric and boracic acids. Phosphoric acid attacks it by heat. Tartaric acid has no perceptible action on it. The oxalic and acetic acids dissolve it in small quantities. The alkalies appear to have some action on it by heat. It combines with sulphuret of potash by fusion. It unites with the greater number of the metals with facility. It decomposes muriate of mercury, and muriate of ammonia. It causes nitrate of potash to detonate. It takes fire spontaneously in oxymuriatic acid gas, and is capable of combining with two different proportions of oxygen.

Method of obtaining Tin.—In order to obtain tin from its ore, a mere fusion of it, with pounded charcoal, is sufficient. Or, a certain quantity of the ore is first freed from sulphur and arsenic by torrefaction; after which it is mixed with equal parts of potash, one-half of common resin, and two parts of black flux; the mixture is then fused in a crucible covered with charcoal, by means of which the metal is recovered in its metallic state. In order to obtain pure tin, let the tin obtained before be rapidly dissolved in strong nitric acid with heat. Thus some of the metals it may contain will be held in solution, and others become oxydized, but muriatic, or nitro-muriatic acid will, on digestion, take up these oxydes, and after sufficient ablution, leave that of tin, which may afterwards be reduced by mixing it when pulverized with double its weight of a flux formed of equal parts of pitch and borax, or resin and borax, and putting it into a covered crucible, lined with charcoal, which must be placed in a forge, and strongly heated for a quarter of an hour.

TI'NCÆ OS. (*Tinca*, a tench.) The mouth of the uterus is so called by some writers, from its resemblance to a tench's mouth.

Tincal. See *Borax*.

Tincto'rius. (From *tingo*, to die.) An epithet of a species of broom used by dyers: the genista tinctoria of Linnæus.

TINCTU'RA. (From *tingo*, to dye.) A tincture. A solution of any substance in spirit of wine. Rectified spirit of wine is the direct menstruum of the resins, and essential oils of vegetables, and totally extracts these active principles from sundry vegetable matters, which yield them to water not at all, or only in part. It dissolves likewise the sweet saccharine matter of vegetables, and generally those parts of animal bodies in which their peculiar smell and taste reside.

The virtues of many vegetables are extracted almost equally by water and rectified spirit; but in the watery and spirituous tinctures of them there is this difference, that the active parts in the watery extractions are blended with a large proportion of inert gummy matter, on which their solubility in this menstruum in a great measure depends, while rectified spirit extracts them almost pure from gum. Hence, when the spirituous tinctures are mixed with watery liquors, a part of what the spirit had taken up from the subject generally separates and subsides, on account of its having been freed from that matter, which, being blended with it in the original vegetable, made it soluble in water. This, however, is not universal, for the active parts of some vegetables, when extracted by rectified spirits, are not precipitated by water, being almost soluble in both menstrua.

Rectified spirit may be tinged by vegetables of all colours, except blue: the leaves of plants, in general, will give out little of their natural colour to watery liquors, but communicate to spirit the whole of their green tincture, which for the most part proves elegant, though not very durable.

Fixed alkaline salts deepen the colour of spirituous tinctures; and hence they have been supposed to promote the dissolving power of the menstruum, though this does not appear from experience; in the trials which have been made no more was found to be taken up in the deep-coloured tinctures than in the paler ones, and often not so much; if the alkali be added after the extraction of the tincture, it will heighten the colour as much as when mixed with the ingredients at first. The addition of these salts in making tinctures is not only needless but prejudicial, as they generally injure the flavour of aromatics, and superadd a quality sometimes contrary to the intention of the medicine.

Volatile alkaline salts, in many cases, promote the action of the spirits. Acids generally weaken it; unless when the acid has been previously combined with the vinous spirit into a compound of new qualities, called dulcified spirit.

Tinctu'ra a'loes. Tincture of aloes. "Take of the extract of spike aloe, powdered, half an ounce; extract of liquorice, an ounce and half; water, a pint; rectified spirit, four fluid ounces. Macerate in a sand-bath until the extracts are dissolved, and then strain." This preparation possesses stomachic and purgative qualities, but should never be given where there is a tendency to hæmorrhoids. In chlorotic cases and amenorrhœa it is preferred to other purges. The dose is from half to a whole fluid ounce.

Tinctu'ra a'loes compo'sita. Compound tincture of aloes, formerly called *Elixir aloes: Elixir proprietatis.* "Take of extract of spiked aloe, powdered, saffron, of each three ounces: tincture of myrrh, two pints. Macerate for fourteen days, and strain." A more stimulating compound than the former. It is a useful application to old indolent ulcers. The dose is from half a fluid drachm to two.

Tinctu'ra a'loes vitriola'ta. With the bitter infusion a drachm or two of this elegant tincture is extremely serviceable against gouty and rheumatic affections of the stomach and bowels, and also in the weaknesses of those organs which frequently attend old age.

Ti'nctura assafœ'tidæ. Tincture of assafœtida, formerly known by the name of *tinctura fœtida*. "Take of assafœtida, four ounces; rectified spirit, two pints. Macerate for fourteen days, and strain." Diluted with water, this is mostly given in all kinds of fits, by the vulgar. It is a useful preparation as an antispasmodic, especially in conjunction with sulphate of zinc. The dose is from half a fluid drachm to two.

Ti'nctura aura'ntii. Tincture of orange-peel, formerly *tinctura corticis aurantii.* "Take of fresh orange-peel, three ounces; proof spirit, two pints. Macerate for fourteen days, and strain." A mild and pleasant stomachic bitter.

Tinctu′ra benzoi′ni compo′sita. Compound tincture of benzoin, formerly known by the names of *tinctura benzoes composita*, and *balsamum traumaticum*. "Take of benzoin, three ounces; storax balsam, strained, two ounces; balsam of Tolu, an ounce; extract of spiked aloe, half an ounce; rectified spirit, two pints. Macerate for fourteen days, and strain." This tincture is more generally applied externally to ulcers and wounds than given internally, though possessing expectorant, antispasmodic, and stimulating powers. Against coughs, spasmodic affections of the stomach, and bowels, and diarrhœa, produced by ulcerations of those parts, it is a very excellent medicine. The dose, when given internally, is from half a fluid drachm to two.

Tinctu′ra calu′mbæ. Tincture of calumba, formerly called *tinctura columbæ*. "Take of calumba root, sliced, two ounces and a half; proof spirit, two pints. Macerate for fourteen days, and strain." This tincture contains the active part of the root, and is generally given with the infusion of it, as a stomachic and adstringent.

Tinctu′ra ca′mphoræ compo′sita. Compound tincture of camphor, formerly called *tinctura opii camphorata*; and *elixir paregoricum*. "Take of camphor, two scruples; opium, dried and powdered, benzoic acid, of each a drachm; proof spirits, two pints. Macerate for fourteen days, and strain." The London college has changed the name of this preparation, because it was occasionally the source of mistakes under its old one, and tincture of opium was sometimes substituted for it. It differs also from the former preparation in the omission of the oil of aniseed, which was often complained of as disagreeable to the palate, and to which, as an addition, no increase of power could be affixed. The dose is from half a fluid drachm to half a fluid ounce.

Tinctu′ra cantha′ridis. See *Tinctura lyttæ*.

Tinctu′ra ca′psici. Tincture of capsicum. "Take of capsicum berries, an ounce; proof spirit, two pints. Macerate for fourteen days, and strain."

Tinctu′ra cardamo′mi. Tincture of cardamom. "Take of cardamom seeds, bruised three ounces; proof spirit, two pints. Macerate for fourteen days, and strain." A powerful stimulating carminative. In spasm of the stomach, an ounce with some other diluted stimulant is given with advantage. The dose may vary according to circumstances, from half a drachm to an ounce and upwards.

Tinctu′ra cardamo′mi compo′sita. Compound tincture of cardamom, formerly called *tinctura stomachica*. "Take of cardamom seeds, carraway-seeds, cochineal, of each powdered, two drachms; cinnamon-bark bruised, half an ounce; raisins, stoned, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." A useful and elegant carminative and cordial. The dose from half a fluid drachm to half a fluid ounce and upwards.

Tinctu′ra cascari′llæ. Tincture of cascarilla. "Take of cascarilla-bark, powdered, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." A stimulating aromatic tonic, that may be exhibited in debility of the bowels and stomach, and in those cases of fever in which the Peruvian bark proves purgative. The dose from half a drachm to two drachms.

Tinctu′ra casto′rei. Tincture of castor. "Take of castor, powdered, two ounces; rectified spirit, two pints. Macerate for seven days, and strain." A powerful stimulant and antispasmodic, mostly exhibited in hysterical affections in a dilute form. The dose is from half a fluid drachm to two.

Tinctu′ra ca′techu. Tincture of catechu, formerly known by the name *tinctura japonica*. "Take of extract of catechu, three ounces; cinnamon-bark, bruised, two ounces; proof spirit, two pints. Macerate for fourteen days, and strain." An aromatic adstringent, mostly given in protracted diarrhœa. The dose is from half a fluid drachm to two.

Tinctu′ra cincho′næ. Tincture of cinchona. Formerly known by the name of *tinctura corticis peruviani simplex*. "Take of lance-leaved cinchona bark, powdered, seven ounces; proof spirit, two pints. Macerate for fourteen days, and strain." The dose is from a fluid drachm to half a fluid ounce. For its virtues see *Cinchona*.

Tinctu′ra cincho′næ ammonia′ta. Ammoniated tincture of cinchona. Volatile tincture of bark. "Take of lance-leaved cinchona bark, powdered, four ounces; aromatic spirit of ammonia, two pints; macerate for ten days, and strain."

Tinctu′ra cincho′næ compo′sita. Compound tincture of cinchona. "Take of lance-leaved cinchona bark, powdered, two ounces; orange-peel, dried, an ounce and a half; serpentary-root, bruised, three drachms, saffron, a drachm; cochineal, powdered, two scruples; proof spirit, twenty fluid ounces. Macerate for fourteen days, and strain." The dose is from one fluid drachm to half a fluid ounce. For its virtues see *Cinchona*.

Tinctu′ra cinnamo′mi. Tincture of cinnamon. Formerly called *aqua cinnamomi fortis*. "Take of cinnamon bark, bruised, three ounces; proof spirit, two pints. Macerate for fourteen days, and strain." The dose is from a fluid drachm to three or more.

Tinctu′ra cinnamo′mi compo′sita. Compound tincture of cinnamon. Formerly called *tinctura aromatica.* "Take of cinnamon bark, bruised, six drachms; cardamom-seeds, bruised, three drachms; long pepper, powdered, ginger-root, sliced, of each two drachms; proof spirit, two pints. Macerate for fourteen days, and strain." The dose is from half a fluid drachm to two or more.

Tinctu'ra digita'lis. Tincture of foxglove. "Take of fox-glove leaves, dried, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." This tincture is introduced in the London Pharmacopœia as possessing the properties of the plant in a convenient, uniform, and permanent form; it is a saturated tincture, and in the same proportions has been long used in general practice. The dose is from ten to forty minims. For its virtues see *Digitalis.*

Tinctu'ra fe'rri aceta'tis. This preparation is directed in the Dublin pharmacopœia, with acetate of potash, two ounces; sulphate of iron, one ounce; and rectified spirit, two pints.

Tinctu'ra fe'rri ammonia'ti. Tincture of ammoniated iron, formerly called *tinctura ferri ammoniacalis: tinctura florum martialium, tinctura martis mynsichti.* "Take of ammoniated iron, four ounces; proof spirit, a pint. Digest and strain." This is a most excellent chalybeate in all atonic affections, and may be given with cinchona in the cure of dropsical and other cachectic diseases. The dose is from half a fluid drachm to two.

Tinctu'ra fe'rri muria'tis. Tincture of muriate of iron. Formerly called *tinctura martis in spiritu salis: tinctura martis cum spiritu salis;* and lately known by the name of *tinctura ferri muriati.* "Take of subcarbonate of iron, half a pound; muriatic acid, a pint; rectified spirit, three pints. Pour the acid upon the sub-carbonate of iron in a glass vessel, and shake it occasionally for three days. Set it by that the fæces, if there be any, may subside; then pour off the solution, and add the spirit." Mr. Cline strongly recommends this in ischuria and many diseases of the kidneys and urinary passages. The dose is from ten to twenty drops. It is a good chalybeate, and serviceable against most diseases of debility without fever.

Tinctu'ra gentia'næ compo'sita. Compound tincture of gentian. Formerly called *tinctura amara.* "Take of gentian root, sliced, two ounces; orange-peel, dried, an ounce; cardamom-seeds, bruised, half an ounce; proof spirit, two pints. Macerate for fourteen days, with a gentle heat, and strain." The dose is from one fluid drachm to two. For its virtues see *Gentiana.*

Tinctu'ra guai'aci. Tincture of guaiacum. "Take of guaiacum resin, powdered, half a pound; rectified spirit, two pints. Macerate for fourteen days, and strain." This tincture, which possesses all the active parts of this peculiar vegetable matter, is now first introduced into the London Pharmacopœia. The dose is from one fluid drachm to two. For its virtues see *Guaiacum.*

Tinctu'ra guai'aci ammonia'ta. Ammoniated tincture of guaiacum. Formerly called *tinctura guaiacina volatilis.* "Take of guaiacum resin, powdered, four ounces; aromatic spirit of ammonia, a pint and a half. Macerate for fourteen days, and strain." The dose is from one fluid drachm to two.

Tinctu'ra helle'bori ni'gri. Tincture of black hellebore. Formerly called *tinctura melampodii.* "Take of black hellebore-root, sliced, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." The dose is from half to a whole fluid drachm. For its virtues consult *Helleborus niger.*

Tinctu'ra hu'muli. Tincture of hop. "Take of hops, five ounces; proof spirit, two pints. Macerate for fourteen days, and strain." Various modifications of the preparations of this bitter have lately been strongly recommended by Mr. Freke, (Observations on Humulus Lupulus), and employed by many practitioners, who believe that it unites sedative and tonic powers, and thus forms a useful combination. The dose is from half to a whole fluid drachm. See *Humulus.*

Tinctu'ra hyoscy'ami. Tincture of henbane. "Take of henbane leaves, dried, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." That the henbane itself is narcotic is abundantly proved, that the same power is also found in its tincture is also certain, but to produce the same effects requires a much larger dose. In some of the statements made to the College of Physicians of London a different opinion has been given, and twenty-five drops have been considered as equivalent to twenty of tincture of opium; it does not produce costiveness, or the subsequent confusion of head which follows the use of opium, and will therefore be, even if its powers be weaker, of considerable use. The dose is from ten minims to one fluid drachm.

Tinctu'ra jala'pæ. Tincture of jalap, formerly called *tinctura jalapii.* "Take of jalap-root, powdered, eight ounces; proof spirit, two pints. Macerate for fourteen days, with a gentle heat, and strain." The dose is from one fluid drachm to half a fluid ounce. For its virtuee see *Convolvulus jalapa.*

Tinctu'ra ki'no. Tincture of kino. "Take of kino, powdered, three ounces; proof spirit, two pints. Macerate for fourteen days, and strain." All the astringency of kino is included in this preparation. The dose is from half a fluid drachm to two. See *Kino.*

Tinctu′ra ly′ttæ. Tincture of blistering fly. Formerly called *tinctura cantharidis:—tinctura cantharidum.* "Take of blistering flies, bruised, three drachms; proof spirit, two pints. Macerate for fourteen days, and strain." In the last edition of the London Pharmacopœia the colouring matter of the former preparation is omitted as useless, and the proportion of the fly increased. It is a very acrid, diuretic, and stimulating preparation, which should always be administered with great caution from its known action on the parts of generation. In chronic eruptions on the skin, and dropsical diseases of the aged, it is often very useful when other medicines have been inert. The dose is from half a fluid drachm to two.

Tinctu′ra my′rrhæ. Tincture of myrrh. "Take of myrrh, bruised, four ounces; rectified spirit, two pints; water, a pint. Macerate for fourteen days, and strain." The dose is from half to a whole fluid drachm. For its virtues see *Myrrha.*

Tinctu′ra o′pii. Tincture of opium. "Take of hard opium, powdered, two ounces and a half; proof spirit, two pints. Macerate for fourteen days, and strain." The dose is from ten minims, or twenty drops, to half a fluid drachm. For its virtues see *Opium.*

Tinctu′ra rhe′i. Tincture of rhubarb. Formerly known by the names of *tinctura rhabarbari,* and *tinctura rhabarbari spirituosa.* "Take of rhubarb-root, sliced, two ounces; cardamom-seeds, bruised, half an ounce; saffron, two drachms; proof spirit, two pints. Macerate for fourteen days, with a gentle heat, and strain." The dose is from half a fluid ounce to one and a half. For its virtues see *Rheum.*

Tinctu′ra rhe′i compo′sita. Compound tincture of rhubarb. Formerly called *tinctura rhabarbari composita.* "Take of rhubarb-root, sliced, two ounces; liquorice-root, bruised, half an ounce; ginger-root, sliced, saffron, of each two drachms; proof spirit, a pint; water, twelve fluid ounces. Macerate for fourteen days, with a gentle heat, and strain." This is a mild stomachic aperient. The dose is from half a fluid ounce to one and a half.

Tinctu′ra sci′llæ. Tincture of squill. "Take of squill-root, fresh dried, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." The virtues of this squill (see *Scilla*) reside in the tincture, which is administered in doses of from twenty drops to a fluid drachm.

Tinctu′ra se′nnæ. Tincture of senna. Formerly called *elixir salutis.* "Take of senna-leaves, three ounces; carraway-seeds, bruised, three drachms; cardamom-seeds, bruised, a drachm; raisins, stoned, four ounces; proof spirit, two pints. Macerate for fourteen days, with a gentle heat, and strain." A carminative, aperient, and purgative in doses from two fluid drachms to a fluid ounce. See *Cassia senna.*

Tinctu′ra serpenta′riæ. Tincture of serpentary. Formerly called *tinctura serpentariæ virginianæ.* "Take of serpentary-root, three ounces; proof spirit, two pints. Macerate for fourteen days, and strain." This tincture possesses, in addition to the virtues of the spirit, those of the serpentaria. The dose is from half a fluid drachm to two. See *Aristolochia serpentaria.*

Tinctu′ra valeria′næ. Tincture of valerian. Formerly called *tinctura valerianæ simplex.* "Take of valerian-root, four ounces; proof spirit, two pints. Macerate for fourteen days, and strain." A useful antispasmodic in conjunction with others. The dose is from half a fluid drachm to two. See *Valeriana.*

Tinctu′ra valeria′næ ammonia′ta. Ammoniated tincture of valerian. Formerly called *tinctura valerianæ volatilis.* "Take of valerian-root, four ounces; aromatic spirit of ammonia, two pints. Macerate for fourteen days, and strain." A strong antispasmodic and stimulating tincture. The dose is from half a fluid drachm to two.

Tinctu′ra vera′tri. A very active alterative, recommended in the cure of epilepsy and cutaneous eruptions. Its administration requires great caution; the white hellebore being a powerful poison.

Tinctu′ra zingi′beris. Tincture of ginger. "Take of ginger-root, sliced, two ounces; proof spirit, two pints. Macerate for fourteen days and strain." A stimulating carminative. The dose is from a fluid drachm to three.

Tincture of aloes. See *Tinctura aloes.*

Tincture of assafœtida. See *Tinctura assafœtidæ.*

Tincture of black hellebore. See *Tinctura hellebori nigri.*

Tincture of blistering fly. See *Tinctura lyttæ.*

Tincture of calumba. See *Tinctura calumbæ.*

Tincture of capsicum. See *Tinctura capsici.*

Tincture of cardamom. See *Tinctura cardamomi.*

Tincture of cascarilla. See *Tinctura cascarillæ.*

Tincture of castor. See *Tinctura castorei.*

Tincture of catechu. See *Tinctura catechu.*

Tincture of cinchona. See *Tinctura cinchonæ.*

Tincture of cinnamon. See *Tinctura cinnamomi.*

Tincture of fox-glove. See *Tinctura digitalis.*

Tincture of guaiacum. See *Tinctura guaiaci.*

Tincture of guaiacum, ammoniated. See *Tinctura guaiaci ammoniata.*

Tincture of ginger. See *Tinctura zingiberis.*

Tincture of henbane. See *Tinctura hyoscyami.*

Tincture of hops. See *Tinctura humuli.*

Tincture of jalap. See *Tinctura jalapæ.*

Tincture of kino. See *Tinctura kino.*

Tincture of myrrh. See *Tinctura myrrhæ.*

Tincture of opium. See *Tinctura opii.*

Tincture of orange-peel. See *Tinctura aurantii.*

Tincture of rhubarb. See *Tinctura rhei.*

Tincture of senna. See *Tinctura sennæ.*

Tincture of serpentary. See *Tinctura serpentariæ.*

Tincture of squills. See *Tinctura scillæ.*

Tincture of valerian. See *Tinctura valerianæ.*

Tincture of valerian, ammoniated. See *Tinctura valerianæ ammoniata.*

Tincture, compound, of aloes. See *Tinctura aloes composita.*

Tincture, compound, of benzoin. See *Tinctura benzoini composita.*

Tincture, compound, of camphor. See *Tinctura camphoræ composita.*

Tincture, compound, of cardamom. See *Tinctura cardamomi composita.*

Tincture, compound, of cinnamon. See *Tinctura cinnamomi composita.*

Tincture, compound, of cinchona. See *Tinctura cinchonæ composita.*

Tincture, compound, of gentian. See *Tinctura gentianæ composita.*

Tincture, compound, of rhubarb. See *Tinctura rhei composita.*

TI'NEA CA'PITIS. (*Tinea*, from *teneo*, to hold.) The scald-head. A genus of disease in the Class, *Locales*, and Order, *Dialyses*, of Cullen; characterised by small ulcers at the root of the hairs of the head, which produce a friable white crust.

Tin-glass. See *Bismuth.*

TINNI'TUS AU'RIUM. See *Paracusis.*

TITA'NIUM. This is a lately discovered metal. It was first noticed by Macgregor as existing in the state of an oxyde, mixed with iron, manganese, and silex, in a greyish-black sand found in the vale of Menachan in Cornwall, and thence named menachanite, or oxyde of titanium, combined with iron. It has since been discovered by Klaproth, in an ore named titanite, or oxyde of titanium, combined with lime and silex. This ore is generally met with crystallized in four-sided prisms, not longer than a quarter of an inch. Its colour is a yellowish-red, or blackish brown; it is opaque and of an imperfect lustre. It breaks with a foliated, uneven, or conchoidal fracture. It exists also in an ore called red schorl of Hungary, or red oxyde of titanium. This ore, which is found generally crystallized in rectangular prisms, is of a brownish-red colour, of the specific gravity 4.2, and its texture foliated. In all these ores titanium exists in the state of an oxyde.

Properties of Titanium.—Titanium has been only obtained in very small agglutinated grains. It is of a red-yellow and crystalline texture, brittle, and extremely refractory. When broken with a hammer while yet hot from its recent reduction it shows a change of colours of purple, violet, and blue. In a very intense heat it is volatilized. Most of the acids have a striking action on this metal: though nitric acid has little effect upon it. It is very oxidable by the muriatic acid. It is not attacked by the alkalis. Nitro-muriatic acid converts it into a white powder. Sulphuric acid when boiled upon it is partly decomposed. It is one of the most infusible metals. It does not combine with sulphur, but it may be united to phosphorus. It does not alloy with copper, lead, or arsenic, but combines with iron.

Method of obtaining Titanium.—It is extremely difficult to reduce the oxyde of titanium to the metallic state. However the experiments of Klaproth, Hecht, and Vauquelin, have proved its reducibility. According to the two latter, one part of oxyde of titanium is to be melted with six of potash; the mass when cold is to be dissolved in water. A white precipitate will be formed which is carbonate of titanium. This carbonate is then made into a paste with oil, and the mixture is put into a crucible filled with charcoal powder and a little alumine. The whole is then exposed for a few hours to the action of a strong heat. The metallic titanium will be found in the form of a blackish puffed-up substance, possessing a metallic appearance.

Tithy'malus. (From τιθος, a dug, and μαλος, tender; so called from its smooth leaves and milky juice.) Spurge. Two plants are directed for medicinal purposes by this name. See *Euphorbia paralias*, and *Esula minor.*

Tithy'malus cypari'ssius. See *Esula minor.*

Tithy'malus para'lios. See *Euphorbia paralias.*

Tithymelæ'a. See *Daphne gnidium.*

Titi'llicum. (From *titillo*, to tickle; so called from its being easily tickled.) The arm-pit.

Toad-flax. See *Antirrhinum linaria.*

Tobacco. See *Nicotiana.*

Tobacco, English. See *Nicotiana rustica.*

Tobacco, Virginian. See *Nicotiana.*

TOES. *Digiti pedis.* They consist of three distinct bones disposed in rows called phalanges, or ranks of the toes. The great toe has but two phalanges; the others have three ranks of bones, which have nothing particular, only the joints are made round and free, formed by a round head on one bone, and by a pretty deep hollow for receiving it, in the one above it.

Tolu balsam. See *Toluifera balsamum.*

Tolui′fera ba′lsamum. The systematic name of the tree which affords the Tolu balsam. *Balsamum Tolutanum.* Balsam of Tolu. The tree *Toluifera balsamum,* of Linnæus, from which this balsam is procured, grows in South America, in the province of Tolu, behind Carthagena, whence we are supplied with the balsam, which is brought to us in little gourd-shells. The balsam is obtained by making incisions into the bark of the tree, and is collected into spoons, which are made of black wax, from which it is poured into proper vessels. It thickens, and in time becomes concrete: it has a fragrant odour, and a warm sweetish taste. It dissolves entirely in alkohol, and communicates its odour and taste to water, by boiling. It contains acid of benzoin. This is the mildest of all the balsams. It has been used as an expectorant; but its powers are very inconsiderable, and it is at present employed principally on account of its flavour, somewhat resembling that of lemons. It is directed, by the pharmacopœias, in the syrupus Tolutanus, tinctura Tolutana, and syrupus balsamicus.

Toluta′num ba′lsamum. See *Toluifera balsamum.*

Tomei′um. (From τεμνω, to cut.) An incision-knife.

Tomenti′tia. (From *tomentum,* a flock of wool; so called from its soft coat.) Cotton-weed.

TOME′NTUM CE′REBRI. (*Tomentum,* a flock of wool.) The small vessels that penetrate the cortical substance of the brain from the pia mater, which, when separated from the brain, and adhering to the pia mater, give it a flocky appearance.

TONIC SPASM. (*Spasmus tònicus,* Τονικος, from τεινω, to pull or draw.) *Contractura a spasmo.* A rigid contraction of the muscles, without relaxàtion, as in trismus, tetanus, &c. See *Tetanus.*

TONICS. (*Medicamenta tonica,* from τονὸω, to strengthen.) Medicines which increase the tone of the muscular fibre; such as vegetable bitters; also stimulants, adstringents, &c.

TONGUE. *Lingua.* A soft fleshy viscus, very moveable in every direction, situated inferiorly in the cavity of the mouth, and constituting the organ of taste. It is divided into a base, body, and back, an inferior surface and two lateral parts. It is composed of muscular fibres, covered by a nervous membrane, on which are a great number of nervous papillæ, particularly at the apex and lateral parts; the rete mucosum, and epidermis. The arteries of the tongue are branches of the ranine and labial. The veins empty themselves into the great linguals, which proceed to the external jugular. The nerves come from the eighth, ninth, and fifth pair. The use of this organ is for chewing, swallowing, sucking, and tasting. See also *Taste.*

TONSILS. *Tonsillæ. Amygdalæ. Tolæ. Toles. Tolles.* Two oblong, suboval, glands, situated one on each side of the fauces, and opening into the cavity of the mouth by twelve or more large excretory ducts.

Tooth. See *Teeth.*

Tooth-ache. See *Odontalgia.*

TO′PHUS. (*Toph,* Hebrew.) A toph. *Epiporoma,* a soft swelling on a bone. The concretion on the teeth or in the joints of gouty people. Also gravel.

TO′PICA. (From τοπος, a place.) Medicines applied to a particular place.

Topina′ria. A species of tumour in the skin of the head.

To′rcular. (From *torqueo,* to twist.) The tourniquet; a bandage to check hæmorrhages after wounds or amputations.

TO′RCULAR HERO′PHILI. (*Torcular,* from *torqueo,* to twist.) *Lechenon. Lenos.* The press of Herophilus. That place where the four sinuses of the dura mater meet together, first accurately described by Herophilus, the anatomist.

Tordy′lium officina′le. (*Tordylium, quasi tortilium,* from *torqueo,* to twist; so named from its tortuous branches.) The systematic name of the officinal *seseli creticum.* The seeds are said to be diuretic.

Tormentil. See *Tormentilla.*

TORMENTI′LLA. (From *tormentum,* pain; because it was supposed to relieve pain in the teeth.)

1. The name of a genus of plants in the Linnæan system. Class, *Icosandria.* Order, *Monogynia.*

2. The pharmacopœial name of the upright septfoil.

Tormenti′lla ere′cta. The systematic name of the upright septfoil. *Heptaphyllum. Consolida rubra. Tormentilla: caule erectiusculo, foliis sessilibus,* of Linnæus. The root is the only part of the plant which is used medicinally; it has a strong styptic taste, but imparts no peculiar sapid flavour: it has been long held in estimation as a powerful adstringent; and, as a proof of its efficacy in this way, it has been substituted for oak bark in the tanning of skins for leather. Tormentil is ordered in the *pulvis cretæ compositus,* of the London Pharmacopœia. See *Tormentilla.*

TO′RMINA. Gripes. Pains in the bowels.

TO′RPOR. A numbness, or deficient sensation.

Tortico′llis. (From *torqueo,* to twist, and *collum,* the neck.) The wry neck.

Tortu′ra o′ssis. The locked jaw.

To'ta bo'na. See *Chenopodium Bonus Henricus.*

TOUCH. *Tactus.* The sensation by which we perceive any thing that is applied to the skin. The organ of touch is formed by the nervous papillæ, which are situated all over the skin, but more especially at the points of the fingers.

Touch-me-not. See *Noli me tangere.*

Touch-wood. See *Agaricus.*

TOURNEFORT, Joseph Pitton de, was born at Aix, in Provence, in 1656. He was destined for the church, but a taste for natural knowledge led him, at his father's death, to change for the profession of physic. He, therefore, qualified himself thoroughly in anatomy, chemistry, and other branches of medical study, and likewise distinguished himself as an elegant writer and lecturer; but he displayed especially an ardent devotion to botany, which ever after made the chief object of his life. His zeal in this pursuit led him to encounter considerable danger in exploring the Alps, Pyrenees, &c. during several seasons, passing the intermediate winters at Montpellier; but he is said to have graduated at Orange. His merits, as a botanist, soon became conspicuous at Paris, and the superintendance of the royal garden was resigned to him by Fagon. In this school he soon drew together a crowd of students; but anxious for farther improvements, he travelled into the neighbouring countries, and thus greatly enriched his collections. He was admitted a member of the Academy of Sciences, and of the Medical Faculty at Paris; and was likewise decorated with the Order of St. Michael. He published about the same period several botanical works, of which the principal is entitled, "Institutiones Rei Herbariæ." In the year 1700 he set out, under royal patronage, on a voyage to the Levant, with the view of investigating the plants of antient writers, and making new discoveries; and on his return, after two years, he wrote a very interesting and valuable account of the expedition in French, which was not published, however, till after his death. This took place in 1708, in consequence of a hurt in the breast, which he received from a carriage. He left his collection of plants to the king, who bestowed in return a pension of a thousand livres on his nephew. Besides the botanical works published by him, he is said to have left several others in manuscript. One object, which had occupied much of his attention, was to determine the medical virtues of plants by a chemical analysis; but the loss of these labours is not to be regretted, as those of Geoffroy, on the same plan, turned out to be without any solid advantage. The elegance and facility of Tournefort's botanical method gained him many followers at first; but it has since been superseded by that of Linnæus, which is much more systematic, and comprehensive. Still, however, it must be acknowledged, that the generic distinctions, established by the former botanist, and most accurately delineated, have been the principal foundation of subsequent improvements.

TOURNIQUET. (French, from *tourner,* to turn.) An instrument used for stopping the flow of blood into a limb.

Toxica'ria macassarie'nsis. An Indian poison obtained from a tree hitherto undescribed by any medical botanist, known by the name of Boas-upas: it is a native of South America. Concerning this plant various and almost incredible particulars have been related, both in antient and modern times; some of them true, others probably founded on superstition. Rumphius testifies that he had not met with any other more dreadful product from any vegetable. And he adds, that this poison, of which the Indians boast, was much more terrible to the Dutch than any warlike instrument. He likewise says, it is his opinion, that it is of the same natural order, if not of the same genus as the cestrum.

Toxicode'ndrum. (From τοξικον, a poison, and δενδρον, a tree.) The poison-tree, which is so noxious that no insects ever come near it. See *Rhus toxicodendron.*

TOXICOLOGY. (*Toxicologia,* from τοξον, an arrow or bow; because the darts of the antients were usually besmeared with some poisonous substance; and λογος, a discourse.) A dissertation on poisons. See *Poison.*

TO'XICUM. (From τοξον, an arrow, which was sometimes poisoned.) Any deadly poison.

Toxite'sia. The artemisia or mugwort.

TRABE'CULA. (*Trabecula,* a small beam.) This word is mostly applied by anatomists to the small medullary fibres of the brain, which constitute the commissures.

TRA'CHEA. (So called from its roughness; from τραχυς, rough.) The windpipe. The trachea is a cartilaginous and membranous canal, through which the air passes into the lungs. Its upper part, which is called the larynx, is composed of five cartilages. The uppermost and smallest of these cartilages is placed over the glottis or mouth of the larynx, and is called epiglottis, as closing the passage to the lungs in the act of swallowing. The sides of the larynx are composed of the two arytenoid cartilages, which are of a very complex figure, not easy to be described. The anterior and larger part of the larynx is made up of two cartilages, one of which is called thyroides or scutiformis, from its being shaped like a buckler: and the other cricoides or annularis, from its resembling a ring. Both these cartilages may be felt immediately under the skin, at the fore-part of the thorax; and the thyroides, by its convexity, forms an eminence called the pomum adami, which is usually more considerable in the male than in the female subject.

All these cartilages are united to each other by means of very elastic ligamentous fibres; and are enabled by the assistance of their several muscles, to dilate or contract the passage of the larynx, and to perform that variety of motion which seems to point out the larynx, as the principal organ of the voice; for when the air passes out through a wound in the trachea, it produces no sound.

These cartilages are moistened by a mucus, which seems to be secreted by minute glands situated near them. The upper part of the trachea, and the cricoid and thyroid cartilages, are in some measure covered anteriorly by a considerable body, which is supposed to be of a glandular structure, and from its situation is called the thyroid gland, though its excretory duct has not yet been discovered, or its real use ascertained. The glottis is entirely covered by a very fine membrane, which is moistened by a constant supply of a watery fluid. From the larynx the canal begins to take the name of trachea, or aspera arteria, and extends from thence as far down as the fourth or fifth vertebræ of the back, where it divides into two branches, which are the right and left bronchial tube. Each of these bronchia ramifies through the substance of that lobe of the lungs, to which it is distributed, by an infinite number of branches, which are formed of cartilages separated from each other like those of the trachea, by an intervening membranous and ligamentary substance. Each of these cartilages is of an angular figure; and as they become gradually less and less in their diameter, the lower ones are in some measure received into those above them, when the lungs, after being inflated, gradually collapse by the air being pushed out from them in expiration. As the branches of the bronchia become more minute, their cartilages become more and more angular and membranous, till at length they become perfectly membranous, and at last become invisible. The trachea is furnished with fleshy or muscular fibres, some of which pass through its whole extent longitudinally, while the others are carried round it in a circular direction, so that by the contraction or relaxation of these fibres, it is enabled to shorten or lengthen itself, and likewise to dilate or contract the diameter of its passage. The trachea and its branches, in all their ramifications, are furnished with a great number of small glands which are lodged in their cellular substance, and discharge a mucous fluid on the inner surface of these tubes.

The cartilages of the trachea, by keeping it constantly open, afford a free passage to the air which we are obliged to be incessantly respiring; and its membranous part, by being capable of contraction or dilatation, enables us to receive and expel the air in a greater or less quantity, and with more or less velocity, as may be required in singing and declamation. This membranous structure of the trachea posteriorly, seems likewise to assist in the descent of the food, by preventing that impediment to its passage down the œsophagus, which might be expected, if the cartilages were complete rings. The trachea receives its arteries from the carotid and subclavian arteries, and its veins pass into the jugulars. Its nerves arise from the recurrent branch of the eighth pair, and from the cervical plexus.

TRACHELA'GRA. (From τραχηλος, the throat, and αγρα, a seizure.) The gout in the neck.

TRACHE'LIUM. (From τραχηλος, the throat,; so called from its efficacy in diseases of the throat.) The herb throat-wort.

TRACHELO. (From τραχηλος, the neck.) Names compounded of this word belong to muscles which are attached to the neck.

TRACHELOCE'LE. (From τραχεια, the wind-pipe, and κηλη, a tumour.) A wen or tumour upon the trachea.

TRACHELO-MASTOIDE'US. A muscle situated on the neck, which assists the complexus, but pulls the head more to one side. It is the *complexus minor seu mastoideus lateralis*, of Winslow. *Trachelo-mastoidien*, of Dumas. It arises from the transverse processes of the five inferior cervical vertebræ, where it is connected with the transversalis cervicis, and of the three superior dorsal, and it is inserted into the middle of the posterior part of the mastoid process.

TRACHELO'PHYMA. (From τραχηλος, the throat, and φυμα, a tumour.) A swelling of the bronchial gland.

TRACHE'LOS. (From τραχυς, rough, because of the rough cartilages.) The windpipe.

TRACHEOTOMY. (*Tracheotomia*, from τραχεια, the trachea, and τεμνω, to cut.) *Laryngotomia*. A synonym of bronchotomy. See *Bronchotomy*.

TRACHO'MA. (From τραχυς, rough.) An asperity in the internal superficies of the eye-lid. The effects are a violent ophthalmia, and a severe pain, as often as the eye-lid moves. The species are,

1. *Trachoma sabulosum*, from sand falling between the eye and the eye-lid of persons travelling, blown by a high wind; this happens chiefly in sabulous situations, and may be prevented by spectacles for the purpose, or by guarding against the flights of sand by covering the eyes.

2. *Trachoma carunculosum*, which arises from caruncles, or fleshy verrucæ, growing in the internal superficies of the eye-lid. This species of the trachoma is called morum palpebræ internæ, because the tuberculous internal superficies appears of a livid

red like a mulberry. Others call these carunculæ pladorotes.

3. *Trachoma herpeticum*, which are hard pustules in the internal superficies of the eyelids. This is also called ficosis, and palpebra ficosa, from its resemblance to the granulated substances in a cut fig. With the Greeks it is nominated atomablepharon, or proptoris.

Tragacanth gum. See *Astragalus*.

TRAGACA'NTHA. (From τραγος, a goat, and ακανϑα, a thorn; so called from its pods resembling the goat's beard.) See *Astragalus*.

TRA'GICUS. (*Musculus tragicus.*) A proper muscle of the ear, which pulls the point of the tragus a little forward.

TRA'GIUM. (From τραγος, a goat; so named from its filthy smell.) Bastard dittany.

TRAGO'CERUS. (From τραγος, a goat, and κερας, a horn; so named from the supposed resemblance of its leaves to the horn of a goat.) The aloe.

TRAGOPO'GON. (From τραγος, a goat, and πωγων, a beard;) so called because its downy seed, while enclosed in the calyx, resembles a goat's beard.

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia*. Order, *Polygamia*.

2. The pharmacopœial name of the common goat's beard.

TRAGOPO'GON PRATE'NSE. The systematic name of the common goat's beard. The young stems of this plant are eaten like asparagus, and are a pleasant and wholesome food. The root is also excellent, and was formerly used medicinally as a diuretic. See *Tragopogon*.

TRAGOPY'RUM. (From τραγος, goat, and πυρον, wheat; so named from its beard.) Buck-wheat.

TRAGO'RCHIS. (From τραγος, a goat, and ορχις, a testicle; so named from the supposed resemblance of its roots to the testicles of a goat.) A species of orchis.

TRAGORI'GANUM. (From τραγος, a goat, and οριγανον, marjoram; so called because goats are fond of it.) A species of wild marjoram.

TRAGOSELI'NUM. (From τραγος, a goat, and σελινον, parsley; named from its hairy coat like the beard of a goat.) The burnet saxifrage was so called. See *Pimpinella*.

TRA'GUS. (Τραγος, a goat; so called from its having numerous little hairs, or from its being hairy like the goat.) A small cartilaginous eminence of the auricular or external ear, placed anteriorly, and connected to the anterior extremity of the helix. It is beset with numerous little hairs, defending in some measure, the entrance of the external auditory passage.

TRA'LLIAN, ALEXANDER, a learned and ingenious physician, who was born at Tralles, in Lydia, and flourished at Rome under the emperor Justinian, about the middle of the sixth century. Like Hippocrates, he travelled over various countries to improve his knowledge. Besides improving upon many of the compositions then employed, he invented several others: and particularly introduced the liberal use of the preparations of iron. He principally followed the practice of Hippocrates and Galen, but not indiscriminately. He appears, however, to have had too great faith in charms and amulets, which was the common error of the age in which he lived.

TRA'MIS. (Τραμις.) *Raphe.* The line which divides the scrotum, and runs on to the anus.

TRANSFUSION. (*Transfusio*, from *transfundo*, to pour from one vessel into another.) The transmission of blood from one animal to another by means of a canula.

TRANSPIRATION. (*Transpiratio*, from *trans*, through, and *spiro*, to breathe.) A synonym of perspiration. See *Perspiration*.

TRANSUDATION. The same as perspiration.

TRANSVERSA'LIS ABDO'MINIS. A muscle situated on the anterior part of the abdomen. It arises internally or posteriorly from the cartilages of the seven lower ribs, being there connected with the intercostals and diaphragm, also from the transverse process of the last vertebra of the back, from those of the four upper vertebræ of the loins, from the inner edge of the crista ilii, and from part of Poupart's ligament, and it is inserted into the inferior bone of the sternum, and almost all the length of the linea alba. Its use is to support and compress the abdominal viscera.

TRANSVERSA'LIS ANTI'CUS PRI'MUS. See *Rectus capitis lateralis.*

TRANSVERSA'LIS CERVI'CIS. See *Longissimus dorsi.*

TRANSVERSA'LIS CO'LLI. A muscle, situated on the posterior part of the neck, which turns the neck obliquely backwards, and a little to one side.

TRANSVERSA'LIS DO'RSI. See *Multifidus spinæ.*

TRANSVERSA'LIS MA'JOR CO'LLI. See *Longissimus dorsi.*

TRANSVERSA'LIS PE'DIS. (*Musculus transversalis pedis.*) A muscle of the foot, which it contracts, by bringing the great toe and the two outermost toes nearer each other.

TRANSVERSE SUTURE. *Sutura transversalis.* This suture runs across the face, and sinks down into the orbits, joining the bones of the skull to the bones of the face; but with so many irregularities and interruptions, that it can scarcely be recognised as a suture.

TRANSVERSO-SPINA'LES. See *Multifidus spinæ.*

TRANSVE'RSUS AU'RIS. (*Musculus transversus auris.*) A muscle of the external ear, which draws the upper part of the concha towards the helix.

TRANSVE'RSUS PERINÆ'I. (*Musculus transversus perinæi.*) A muscle of the organs of generation, which sustains and keeps the perinæum in its proper place.

Transve'rsus perinæ'i a'lter. *Prostaticus inferior*, of Winslow. A small muscle occasionally found accompanying the former.

TRAPA. (A term given by Linnæus, whose idea is certainly taken from the warlike instrument called caltrop, the tribulus of the antients, which consisted of four iron radiated spikes, so placed, that one of them must always stand upwards, in order to wound the feet of the passengers. Such is the figure of the singular fruit of this genus; hence named by Tournefort *tribuloides*. *Calcitrapa*, an old botanical term of similar meaning to *tribulus*, is compounded, perhaps, of *calco*, to tread or kick, and τρεπω, to turn, because the caltrops are continually kicked over if they fail of their intended mischief: here we have the immediate origin of *trapa*.) The name of a genus of plants, Class, *Tetrandria*. Order, *Monogynia*.

Tra'pa na'tans. The systematic name of the plant which affords the nux aquatica. *Tribulus aquaticus*. Caltrops. The fruit is of a quadrangular and somewhat oval shape, including a nut of a sweet farinaceous flavour, somewhat like that of the chesnut, which is apt to constipate the bowels, and produce disease; however, it is said to be nutritious and demulcent, and to be useful in diarrhœas from abraded bowels, and against calculus. Likewise a poultice of these nuts is said to be efficacious in resolving hard and indolent tumours.

TRAPE'ZIUM. (A four-sided figure; so called from its shape.) The first bone of the second row of the carpus.

TRAPE'ZIUS. (*Musculus trapezius*, from τραπεζιος, four-square; so named from its shape.) *Cucullaris*. A muscle situated immediately under the integuments of the posterior part of the neck and back. It arises by a thick, round, and short tendon, from the lower part of a protuberance in the middle of the occipital bone backwards, and from the rough line that is extended from thence towards the mastoid process of the os temporis, and by a thin membranous tendon, which covers part of the complexus and splenius. It then runs downwards along the nape of the neck, and rises tendinous from the spinous processes of the two lowermost vertebræ of the neck, and from the spinous processes of all the vertebræ of the back, being inseparably united to its fellow, the whole length of its origin, by tendinous fibres, which, in the nape of the neck, form what is called *ligamentum colli*, or the cervical ligament. It is inserted fleshy into the broad and posterior half of the clavicle, tendinous and fleshy into one-half of the acromion, and into almost all the spine of the scapula.

This muscle serves to move the scapula in different directions. Its upper descending fibres pull it obliquely upwards; its middle transverse ones pull it directly backwards; its inferior fibres, which ascend obliquely upwards, draw it obliquely downwards and backwards.

The upper part of the muscle acts upon the neck and head, the latter of which it draws backwards, and turns upon its axis. It likewise concurs with other muscles in counteracting the flexion of the head forwards.

TRAPEZOI'DES OS. The second bone of the second row of the carpus; so called from its resemblance to the *trapezium*, or quadrilateral geometrical figure.

Traumatic. (From τραυμα, a wound.) Any thing relating to a wound.

Traveller's joy. See *Clematis vitalba.*

Treacle. See *Theriaca.*

Treacle, mustard. See *Thlaspi.*

Trefoil, marsh. See *Menyanthes trifoliata.*

TRE'MOR. An involuntary trembling of parts.

TREPAN. *Trephine.* An instrument used by surgeons to remove a portion of bone from the skull.

TREPHINE. See *Trepan.*

TREW, Christopher James, was born at Lauffen, in Franconia, in 1695; and settled as a physician at Nuremburg, where he gained so much reputation, as to be made director of the academy "Naturæ Curiosorum." He also contributed much towards establishing a society under the title of "Commercium Literarium Noricum," for the advancement of medical and natural knowledge, which published some valuable memoirs. To these societies he communicated several papers, and he also published some splendid works in anatomy and botany. He died in 1769.

Triangula'ris. See *Sternocostales* and *Depressor anguli oris.*

Tri'bulus aqua'ticus. (*Tribulus*, from τριβω, to vex, an instrument of war to be thrown in the way to annoy the enemy's horse: hence the name of an herb from its resemblance to this instrument.) See *Trapa natans.*

Tricauda'lis. (From *tres*, three, and *cauda*, a tail.) A muscle with three tails.

TRI'CEPS ADDU'CTOR FE'MORIS. *Triceps*, from *tres*, three, and *caput*, a head; having three heads. Under this appellation are comprehended three distinct muscles. See *Adductor brevis, longus*, and *magnus femoris.*

Tri'ceps au'ris. See *Retrahentes auris.*

TRI'CEPS EXTE'NSOR CU'BITI. This muscle, which occupies all the posterior part of the os humeri, is described as two distinct muscles by Douglas, and as three by Winslow. The upper part of its long head is covered by the deltoides: the rest of the muscle is situated immediately under the integuments.

It arises, as its name indicates, by three heads. The first, or long head, (the long head of the biceps externus, of Douglas; anconeus major, of Winslow, as it is called), springs, by a flat tendon of an inch in breadth, from the anterior extremity of the inferior costa of the scapula, near its neck, and below the origin of the teres minor. The second head, (the short head of the biceps externus, of Douglas; anconeus externus of Winslow), arises by an acute tendinous, and fleshy beginning, from the upper and outer part of the os humeri, at the bottom of its great tuberosity. The third head, (brachialis externus of Douglas; anconeus internus of Winslow,) which is the shortest of the three, originates by an acute fleshy beginning, from the back part of the os humeri, behind the flat tendon of the latissimus dorsi. These three portions unite about the middle of the arm, so as to form one thick and powerful muscle, which adheres to the os humeri to within an inch of the elbow, where it begins to form a broad tendon, which, after adhering to the capsular ligament of the elbow, is inserted into the upper and outer part of the olecranon, and sends off a great number of fibres, which help to form the fascia on the outer part of the fore-arm. The use of this muscle is to extend the fore-arm.

TRICHI'ASIS. (From θριξ, a hair.) *Trichia. Trichosis. Entropeon. Distichiasis. Districhiasis. Capillitium. Distichia.* A disease of the eye-lashes, in which they are turned in towards the bulb of the eye.

TRICHI'SMUS. (From θριξ, hair.) A species of fracture which appears like a hair, and is almost imperceptible.

TRICHO'MA. (From τριχες, the hair.) The plaited hair. See *Plica.*

TRICHO'MANES. (From τριχες, hair, and μανος, thin, lax; so called, because it resembles fine hair.) Common maiden-hair. See *Asplenium.*

TRICHO'SIS. See *Plica.*

TRICHU'RIS. (From ϑριξ, a hair.) The long hair-worm. See *Worms.*

TRICUSPID VALVES. (*Valvulæ tricuspides*, from *tres*, three, and *cuspis*, a point; so called from their being three-pointed.) The name of the valve in the right ventricle.

Trifoil, water. See *Menyanthes trifoliata.*

TRIFO'LIUM. (From *tres*, three, and *folium*, a leaf; so called because it has three leaves on each stalk.) The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Trefoil.

TRIFO'LIUM ACETO'SUM. The wood-sorrel was so called. See *Oxalis acetosella.*

TRIFO'LIUM AQUA'TICUM. See *Menyanthes trifoliata.*

TRIFO'LIUM ARVE'NSE. Hare's-foot trefoil or lagopodium.

TRIFO'LIUM AU'REUM. Herb trinity; noble liverwort.

TRIFO'LIUM CABALLI'NUM. Melilotus.

TRIFO'LIUM CÆRU'LEUM. Sweet trefoil.

TRIFO'LIUM FALCA'TUM. The Auricula muris. See *Hieracium pilosella.*

TRIFO'LIUM FIBRI'NUM. See *Menyanthes trifoliata.*

TRIFO'LIUM HEPA'TICUM. See *Anemone hepatica.*

TRIFO'LIUM MELILO'TUS OFFICINA'LIS. The systematic name of the officinal melilot. *Melilotus. Lotus sylvestris. Sertula campana. Trifolium caballinum. Coroda regia. Trifolium odoratum.* Common melilot. This plant has been said to be resolvent, emollient, anodyne, and to participate of the virtues of chamomile. Its taste is unpleasant, subacrid, subsaline, but not bitter; when fresh it has scarcely any smell; in drying it acquires a pretty strong one of the aromatic kind, but not agreeable. The principal use of melilot has been in clysters, fomentations, and other external applications.

TRIFO'LIUM ODORA'TUM. See *Trifolium melilotus officinalis.*

TRIFO'LIUM PALUDO'SUM. See *Menyanthes trifoliata.*

TRIGE'MINI. (*Trigeminus*, from *tres*, three, and *geminus*, double; three-fold.) The fifth pair of nerves, which arise from the crura of the cerebellum, and are divided within the cavity of the cranium into three branches, viz. the *orbital*, *superior*, and *inferior maxillary.* The orbital branch is divided into the frontal, lachrymal, and nasal nerves; the superior maxillary into the spheno-palatine, posterior alveolar, and infra-orbital nerves; and the inferior maxillary into two branches, the internal lingual, and one more properly called the inferior maxillary.

TRIGONE'LLA. (*Trigonella*, a diminutive of *trigona*, three-sided, alluding to its little triangular flower.) The name of a genus of plants. Class, *Diadelphia.* Order, *Decandria.*

TRIGONE'LLA FŒ'NUM GRÆ'CUM. The systematic name of the fœnugreek. *Fœnum græcum. Buceras. Ægoceras.* Fenugreek. *Trigonella fœnum græcum, leguminibus sessilibus strictis erectiusculis subfalcatis acuminatis, caule erecto*, of Linnæus. A native of Montpellier. The seeds are brought to us from the southern parts of France and Germany; they have a strong disagreeable smell, and an unctuous farinaceous taste, accompanied with a slight bitterness. They are esteemed as assisting the formation of pus, in inflammatory tumours; and the meal, with that intention, is made into a poultice with milk.

Trinita′tis he′rba. See *Anemone hepatica.*

Trinity-herb. See *Anemone hepatica.*

Tripa′strum ape′llidis. *Tripastrum Archimedis.* A surgical instrument for extending fractured limbs; so named because it resembled a machine invented by Apellides or Archimedes, for launching of ships, and because it was worked with three cords.

Trique′tra ossi′cula. (*Triquetrus,* from *tres,* three.) *Ossicula Wormiana.* The triangular-shaped bones, which are found mostly in the course of the lambdoidal suture.

TRI′SMUS. (From τριζω, to gnash.) Locked jaw. Spastic rigidity of the under jaw. *Capistrum,* of Vogel. Dr. Cullen makes two species. 1. *Trismus nascentium,* attacking infants during the two first weeks from their birth. 2. *Trismus traumaticus,* attacking persons of all ages, and arising from cold or a wound. See *Tetanus.*

Trissa′go. (*Quasi tristago,* from *tristis,* sad; because it dispels sadness.) The common germander is sometimes so called. See *Teucrium chamædrys.*

Trissa′go pallu′stris. The water-germander was so called. See *Teucrium scordium.*

Tritæo′phya. (From τριταιος, tertian, and φυω, importing a like nature or original.) It is an epithet of a fever much of a nature with a tertian, and taking its rise from it. Some call it a continued tertian. It is remittent or intermittent.

Tritæo′phya cau′sus. The fever called *causus* by Hippocrates.

Tritæ′us. Τριταιος. The same as *Tritæophya.*

TRI′TICUM. (From *tero,* to thresh from the husk.) See *Wheat.*

Tri′ticum repe′ns. *Gramen caninum. Gramen Dioscoridis. Gramen repens. Loliaceum radice repente.* Dog's grass. Couch grass. A very common grass, the roots of which are agreeably sweet, and possess aperient properties. The expressed juice is recommended to be given largely.

Trito′rium. (From *tritus,* beat small.) A mortar. Also a glass for separating the oil from the water in distilling.

TROCAR. (Corrupted from *un trois quart,* French, *a three quarters,* from the three sides with which the point is made.) The name of an instrument used in tapping for the dropsy.

TROCHA′NTER. (From τρεχω, to run; because the muscles inserted into them perform the office of running.) Two processes of the thigh-bone, which are distinguished into the greater and lesser. See *Femur.*

Trochi′sci a′myli. Starch lozenges are used in tickling coughs and acidities of the stomach and bowels.

Trochi′sci cre′tæ. These are exhibited in cardialgia, acidities of the primæ viæ and diarrhœa.

Trochi′sci glycyrrhi′zæ. A pectoral and demulcent lozenge.

Trochi′sci glycyrrhi′zæ cum o′pio. This lozenge possesses pectoral and anodyne qualities, but requires that the quantity be regulated, one grain of opium being contained in a drachm.

Trochi′sci magne′siæ. Extremely serviceable in pyrosis and flatulent colic.

Trochi′sci ni′tri. An attenuating diaphoretic, calculated to remove viscid phlegm arising from inflammatory angina.

Trochi′sci su′lphuris. Aperient and antiscorbutic.

TROCHI′SCUS. (Dim. of τροχος, a wheel.) A troch or round tablet. Troches and lozenges are composed of powders made up with glutinous substances into little cakes, and afterwards dried. This form is principally used for the more commodious exhibition of certain medicines, by fitting them to dissolve slowly in the mouth, so as to pass by degrees into the stomach; and hence these preparations have generally a considerable portion of sugar or other materials grateful to the palate. Some powders have likewise been reduced into troches, with a view to their preparation, though possibly for no very good reasons: for the moistening them and afterwards drying them in the air, must on this account be of greater injury, than any advantage accruing from this form can counter-balance.

General rules for making troches:

1. If the mass proves so glutinous as to stick to the fingers in making up, the hands may be anointed with any sweet or aromatic oil; or else sprinkled with starch, or liquorice powder, or with flour.

2. In order to thoroughly dry the troches, put them on an inverted sieve, in a shady airy place, and frequently turn them.

3. Troches are to be kept in glass vessels, or in earthern ones well glazed.

TRO′CHLEA. (Τροχλεα, a pulley, from τρεχω, to run.) A kind of cartilaginous pulley, through which the tendon of one of the muscles of the eye passes.

Trochlea′ris. See *Obliquus superior oculi.*

TROCHLEATO′RES. The fourth pair of nerves are so called, because they are inserted into the musculus trochlearis of the eye. See *Pathetici.*

TROCHOI′DES. (From τροχος, a wheel, and ειδος, resemblance.) *Axea commissura.* A species of diarthrosis, or moveable connection of bones, in which one bone rotates upon another; as the first cervical vertebra upon the odontoid process of the second.

TRONCHIN, Theodore, was born at Geneva in 1709, and went to study under Boerhaave at Leyden, where he graduated in 1730. He then settled at Amsterdam, became a member of the College of Physicians, and an inspector of hospitals; and distinguished himself as a zealous promoter of inoculation. In 1754 he returned to Geneva, and ranked among the most eminent practitioners in Europe; a chair of medicine was instituted in his favour, and the Society of Pastors admitted him into their body. He was employed by the Duke of Orleans, and other persons of rank at Paris, to inoculate their children; and performed the same office for the Duke of Parma. In 1766 he accepted the appointment of principal physician to the Duke of Orleans; though he had previously declined an invitation from the Empress of Russia. His practice appears to have been simple and judicious, and his conduct marked by humanity and charity. He had little time for writing, but besides his inaugural dissertation he published a treatise on the Colica Pictonum in 1757, and contributed several articles to the Encyclopædia, and to the Memoirs of the Academy of Surgery: and to an edition of the works of Baillou he gave a Preface on the State of Medicine. He had the honour of being a member of the chief medical and scientific societies in Europe. His death happened in 1781.

TROPÆ'OLUM. (A diminutive of *tropæum*, or *τρωπαιον*, a warlike trophy. This fanciful but elegant name was chosen by Linnæus for this singular and striking genus, because he conceived the shield-like leaves and the brilliant flowers, shaped like golden helmets, pierced through and through, and stained with blood, might well justify such an allusion.) The name of a genus of plants. Class, *Octandria*. Order, *Monogynia*.

Tropæ'olum ma'jus. The systematic name of the Indian cress. *Nasturtium indicum. Acriviola. Flos sanguineus monardi. Nasturtium peruvianum. Cardamindum minus.* Greater Indian cress or nasturtium. This plant is a native of Peru; it was first brought to France in 1684, and there called *La grande capucine*. In its recent state this plant, and more especially its flowers, have a smell and taste resembling those of water-cress; and the leaves, on being bruised in a mortar, emit a pungent odour, somewhat like that of horse-radish. By distillation with water they impregnate the fluid in a considerable degree with the smell and flavour of the plant. Hence the antisorbutic character of the nasturtium seems to be well founded, at least as far as we are able to judge from its sensible qualities: therefore in all those cases where the warm and antiscorbutic vegetables are recommended, this plant may be occasionally adopted as a pleasant and effectual variety. Patients to whom the nauseous taste of scurvy-grass is intolerable, may find a grateful substitute in the nasturtium. The flowers are frequently used in salads, and the capsules are by many highly esteemed as a pickle. The flowers, in the warm summer months, about the time of sunset, have been observed to emit sparks like those of the electrical kind.

Truffle. See *Lycoperdon tuber.*

TU'BA EUSTACHIA'NA. *Tuba Aristotelica. Aquæducus. Aquæductus Fallopii. Meatus siccus. Palatinus ductus. Ductus auris palatinus.* The auditory tube. The Eustachian tube, so called because it was first described by Eustachius, arises in each ear from the anterior extremity of the tympanum by means of a bony semi-canal; runs forwards and inwards, at the same time becoming gradually smaller; and after perforating the petrous portion of the temporal bone terminates in a passage, partly cartilaginous and partly membranous, narrow at the beginning, but becoming gradually larger, and ending in a pouch behind the soft palate. It is through this orifice that the pituitary membrane of the nose enters the tympanum. It is always open, and affords a free passage for the air into the tympanum; hence persons hear better with their mouth open.

TU'BA FALLOPIA'NA. *Tuba Fallopina.* The Fallopian tube first described by Fallopius. The uterine tube. A canal included in two laminæ of the peritonæum, which arises at each side of the fundus of the uterus, passes transversely, and ends with its extremity turned downwards at the ovarium. Its use is to grasp the ovum, and convey the prolific vapour to it, and to conduct the fertilized ovum into the cavity of the uterus.

TUBERCLE. *Tuberculum.* A hard superficial tumour, circumscribed and permanent: or proceeding very slowly to suppuration.

TUBE'RCULA QUADRIGE'MINA. *Corpora quadrigemina. Eminentiæ quadrigeminæ.* Four white oval tubercles of the brain, two of which are situated on each side over the posterior orifice of the third ventricle and the aqueduct of Sylvius. The antients called them nates and testes, from their supposed resemblance.

TUBE'RCULUM ANNULA'RE. The commencement of the medulla oblongata.

TUBE'RCULUM LOWE'RI. An eminence in the right auricle of the heart where the two venæ cavæ meet; so called from Lower, who first described it.

TU'BULI LACTI'FERI. The ducts or tubes in the nipple, through which the milk passes.

TULP, Nicholas, was the son of an opulent merchant, and born at Amsterdam in 1593. Having studied and graduated at Leyden, he settled in his native city, and rose to a high rank, not only in his profession, but also as a citizen. He was made burgomaster in 1652, and in that station resisted the invasion of Holland by Lewis XIV. twenty years after, and thus saved his country; on which occasion a medal was struck to his honour. He died in 1674. His three books of Medical Observations have been several times reprinted, and contain many valuable physiological remarks. He is said to have been amongst the first who observed the lacteal vessels.

TU'MOUR. A swelling.

TUMO'RES. (*Tumor*, from *tumeo*, to swell.) Tumours. An order in the Class, *Locales*, of Cullen's nosology, comprehending partial swellings without inflammation.

TUNBRIDGE WATER. Tunbridge Wells is a populous village in the county of Kent, which contains many chalybeate springs, all of which resemble each other very closely in their chemical properties. Two of these are chiefly used, which yield about a gallon in a minute, and therefore afford an abundant supply for the numerous invalids who yearly resort thither. The analysis of Tunbridge spring proves it to be a very pure water, as to the quantity of solid matter; and the saline contents (the iron excepted) are such as may be found in almost any water that is used as common drink. It is only as a chalybeate, and in the quantity of carbonic acid, that it differs from common water. Of this acid it contains one twenty-second of its bulk. The general operation of this chalybeate water is to increase the power of the secretory system in a gradual, uniform manner, and to impart tone and strength to all the functions; hence it is asserted to be of eminent service in irregular digestion; flatulency; in the incipient stages of those chronic disorders, which are attended with great debility; in chlorosis; and numerous other complaints incident to the female sex. The prescribed method of using the Tunbridge water, observes Dr. Saunders, is judicious. The whole of the quantity daily used, is taken at about two or three intervals, beginning at eight o'clock in the morning, and finishing about noon. The dose at each time varies from about one to three quarters of a pint; according to the age, sex, and general constitution of the patient, and especially the duration of the course, for it is found that these waters lose much of their effect by long habit.

TUNGSTEN. (*Tungsten*, Swed. ponderous stone.) This metal, which is never found but in combination, is by no means common. The substance known to mineralogists, under the name of tungsten, was, after some time, discovered to consist of lime, combined with the acid of this metal. This ore is now called *tungstate of lime*, and is exceedingly scarce. It has been found in Sweden and Germany, both in masses and crystallized, of a yellowish white, or grey colour. It has a sparry appearance, is shining, of a lamellated texture, and semitransparent. The same metallic acid is likewise found united to iron and manganese; it then forms the ore called Wolfram, or *tungstate of iron and manganese*. This ore occurs both massive and crystallized, and is found in Cornwall, Germany, France, and Spain. Its colour is brownish black, and its texture foliated. It has a metallic lustre, and a lamellated texture; it is brittle and very heavy; it is found in solid masses in the state of layers interspersed with quartz. These two substances are therefore ores of the same metal.

Properties. — Tungsten appears of a steel-grey colour. Its specific gravity is about 17.6. It is one of the hardest metals, but it is exceedingly brittle; and it is said to be almost as infusible as platina. Heated in the air it becomes converted into a yellow pulverulent oxyde, which becomes blue by a strong heat or when exposed to light. Tungsten combines with phosphorus and sulphur, and with silver, copper, iron, lead, tin, antimony, and bismuth; but it does not unite with gold and platina. It is not attacked by sulphuric, nitric, or muriatic acids; nitro-muriatic acid acts upon it very slightly. It is oxydizable and acidifiable by the nitrates and hyperoxymuriates. It colours the vitrified earths or the vitreous fluxes, of a blue or brown colour. It is not known what its action may be on water and different oxydes. Its action on the alkalies is likewise unknown. It is not employed yet, but promises real utility, on account of its colouring property, as a basis for pigment, since the compounds it is said to form with vegetable colouring matters, afford colours so permanent, as not to be acted on by the most concentrated oxymuriatic acid, the great enemy of vegetable colours.

Methods of obtaining Tungsten. — The method of obtaining metallic tungsten is a problem in chemistry. Scheele, Bergman, and Gmelin, did not succeed in their attempts to procure it. Klaproth tried to reduce the yellow oxyde of this metal with a variety of combustible substances, but without success. Messrs. Ruprecht and Tondy say they have obtained this metal by using combustible substances alone: and by a mixture of combustible and alkaline matter.

The following process is recommended by Richter, an ingenious German chemist.

Let equal parts of tungstic acid and dried blood be exposed for some time to a red heat in a crucible; press the black powder, which is formed into another smaller crucible, and expose it again to a violent heat in a forge, for at least half an hour. Tungsten will then be found, according to this chemist, in its metallic state in the crucible.

TU'NICA. (*A tuendo corpore*, because it defends the body.) A membrane or covering, as the coats of the eye, &c.

Tu'nica acinifo'rmis. The uvea or posterior lamella of the iris.

Tu'nica albugi'nea o'culi. See *Conjunctive membrane.*

Tu'nica albugi'nea te'stis. See *Albuginea testis.*

Tu'nica arachnoide'a. See *Arachnoid membrane.*

Tu'nica cellulo'sa ruy'schii. The second coat of the intestines.

Tu'nica choroide'a. See *Choroid membrane.*

Tu'nica conjuncti'va. See *Conjunctive membrane.*

Tu'nica co'rnea. See *Cornea.*

Tu'nica filamento'sa. The false or spongy chorion.

Tu'nica re'tina. See *Retina.*

Tu'nica vagina'lis te'stis. A continuation of the peritonæum through the inguinal ring, which loosely invests the testicle and spermatic cord.

Tu'nica villo'sa. The villous or inner folding coat of the intestines.

TUNGSTATE. *Tunstas.* A salt formed by the combination of the tungstic acid, with different bases, as *tungstate of lime*, &c.

Turbeth, mineral. See *Hydrargyrus vitriolatus.*

Turbeth root. See *Convolvulus turpethum.*

TURBINATED BONES. (*Ossa turbinata*, from *turbino*, to sharpen at the top, shaped like a sugar-loaf.) The superior spongy portion of the ethmoid bone, and the inferior spongy bones, are so called by some writers.

Turbina'tum. The pineal gland.

Turbith. A cathartic Eastern bark; a species of cicely.

Tu'rcica se'lla. See *Sella turcica.*

Turmeric. See *Curcuma.*

Turnhoof. A vulgar name of the ground-ivy. See *Glecoma hederacea.*

Turnip. See *Brassica rapa.*

Turnip, French. See *Brassica rapa.*

TURPENTINE. The different turpentines employed medicinally are, the Chian or Cyprus turpentine, (see *Pistacia terebinthus*), the common turpentine, (see *Terebinthina communis*), and the Venice turpentine, (see *Pinus larix*). All these have been considered as hot, stimulating corroborants and detergents; qualities which they possess in common. They stimulate the primæ viæ, and prove laxative; when carried into the blood-vessels they excite the whole system, and thus prove serviceable in chronic rheumatism and paralysis. Turpentine readily passes off by urine, which it imbues with a peculiar odour; also by perspiration and by exhalation from the lungs; and to these respective effects are ascribed the virtues it possesses in gravelly complaints, scurvy, and pulmonic disorders. Turpentine is much used in gleets, and fluor albus, and in general with much success. The essential oil, in which the virtues of turpentine reside, is not only preferred for external use, as a rubefacient, but also internally as a diuretic and styptic; the latter of which qualities it possesses in a very high degree. Formerly turpentine was much used as a digestive application to ulcers, &c. but in the modern practice of surgery, it is almost wholly exploded.

Turpeth, mineral. See *Hydrargyrus vitriolatus.*

Turpe'thum. (From *Turpeth*, Ind.) Turbeth. See *Convolvulus turpethum.*

Turpe'thum minera'le. See *Hydrargyrus vitriolatus.*

TURU'NDA. (A *terendo*, from its being rolled up.) A tent or suppository.

TUSSILA'GO. (From *tussis*, a cough; because it relieves coughs.)

1. The name of a genus of plants in the Linnæan system. Class, *Syngenesia.* Order, *Polygamia superflua.*

2. The pharmacopœial name of the coltsfoot. See *Tussilago farfara.*

Tussila'go fa'rfara. (*Farfara*, from *farfarus*, the white poplar; so called because its leaves resemble those of the white poplar.) The systematic name of the coltsfoot. *Bechium. Bechion. Calceum equinum. Chamæleuce. Filius antepatrem. Farfarella. Farfara. Tussilago vulgaris. Farfara bechium. Ungula caballina.* Coltsfoot. *Tussilago farfara: scapo unifloro imbricato, foliis subcordatis angulatis denticulatis.* The sensible qualities of this plant are very inconsiderable; it has a rough mucilaginous taste, but no remarkable smell. The leaves have always been esteemed as possessing demulcent and pectoral virtues, and hence they have been exhibited in pulmonary consumptions, coughs, asthmas, and catarrhal affections. It is used as tea, or given in the way of infusion with liquorice-root or honey.

Tussila'go petasi'tes. (From πετασος, a hat; so named because its leaves are shaped like a hat.) The systematic name of the butter-bur. *Petasites.* Pestilentwort. *Tussilago petasites*, of Linnæus. The roots of this plant are recommended as aperient and alexipharmic, and promise, though now forgotten, to be of considerable activity. They have a strong smell, and a bitterish acrid taste, of the aromatic kind, but not agreeable.

TU'SSIS. A cough. A sonorous concussion of the breast, produced by the violent and, for the most part, involuntary motion of the muscles of respiration. It is symptomatic of many diseases.

Tu′ssis convulsi′va. See *Pertussis.*

Tu′ssis exanthema′tica. A cough attendant on an eruption.

Tu′ssis feri′na. See *Pertussis.*

Tu′tia. (Persian.) *Pompholyx. Cadmia.* Tutty. A grey oxyde of zinc; it is generally formed by fusing brass or copper, mixed with blende, when it is incrusted in the chimnies of the furnace. Mixed with any common cerate, it is applied to the eye, in debilitated states of the conjunctive membrane.

Tu′tia prepara′ta. Prepared tutty is often put into collyria, to which it imparts an adstringent virtue.

Tutty. See *Tutia.*

Tylo′sis. (From τυλος, a callus.) *Tyloma.* An induration or callus of the margin of the eye-lids.

Ty′mpani membra′na. See *Membrana tympani.*

TYMPANI′TES. (From τυμπανον, a drum; so called because the belly is distended with wind, and sounds like a drum when struck.) Tympany. An elastic distention of the abdomen not readily yielding to pressure, and sounding like a drum, with costiveness and atrophy, but no fluctuation. Species: 1. *Tympanites intestinalis,* a lodgment of wind in the intestines, known by the discharge of wind giving relief. 2. *Tympanites abdominalis,* when the wind is in the cavity of the abdomen.

TY′MPANUM. (Τυμπανον. A drum.) The drum or barrel of the ear. The hollow part of the ear in which are lodged the bones of the ear. It begins behind the membrane of the tympanum, which terminates the external auditory passage, and is surrounded by the petrous portion of the temporal bone. It terminates at the cochlea of the labyrinth, and has opening into it four foramina, viz. the orifices of the Eustachian tube and mastoid sinus, the fenestra ovalis, and rotunda. It contains the four ossicula auditus.

TY′PHA. (From τιφος, a lake, because it grows in marshy places.) The name of a genus of plants in the Linnæan system. The cat's tail.

Typhoma′nia. (From τυφω, to burn, and μανια, delirium.) A complication of phrensy and lethargy with fever.

TY′PHUS. (From τυφος, stupor.) A species of continued fever, characterized by great debility, a tendency in the fluids to putrefaction and the ordinary symptoms of fever. It is to be readily distinguished from the inflammatory by the smallness of the pulse and the sudden and great debility which ensues on its first attack; and, in its more advanced stage, by the petechiæ, or purple spots, which come out on various parts of the body, and the fetid stools which are discharged; and it may be distinguished from a nervous fever by the great violence of all its symptoms on its first coming on.

The most general cause that gives rise to this disease, is contagion, applied either immediately from the body of a person labouring under it, or conveyed in clothes or merchandise, &c.; but it may be occasioned by the effluvia arising from either animal or vegetable substances in a decayed or putrid state; and hence it is, that in low and marshy countries it is apt to be prevalent when intense and sultry heat quickly succeeds any great inundation. A want of proper cleanliness and confined air are likewise causes of this fever; hence it prevails in hospitals, gaols, camps, and on board of ships, especially when such places are much crowded, and the strictest attention is not paid to a free ventilation and due cleanliness. A close state of the atmosphere, with damp weather, is likewise apt to give rise to putrid fever. Those of lax fibres, and who have been weakened by any previous debilitating cause, such as poor diet, long fasting, hard labour, continued want of sleep, &c. are most liable to it.

On the first coming on of the disease, the person is seized with languor, dejection of spirits, amazing depression and loss of muscular strength, universal weariness and soreness, pains in the head, back, and extremities, and rigors; the eyes appear full, heavy, yellowish, and often a little inflamed; the temporal arteries throb violently, the tongue is dry and parched, respiration is commonly laborious, and interrupted with deep sighing; the breath is hot and offensive, the urine is crude and pale, the body is costive, and the pulse is usually quick, small, and hard, and now and then fluttering and unequal. Sometimes a great heat, load, and pain are felt at the pit of the stomach, and a vomiting of bilious matter ensues.

As the disease advances, the pulse increases in frequency, (beating often from 100 to 130 in a minute); there is vast debility, a great heat and dryness in the skin, oppression at the breast, with anxiety, sighing, and moaning; the thirst is greatly increased; the tongue, mouth, lips and teeth are covered over with a brown or black tenacious fur; the speech is inarticulate, and scarcely intelligible; the patient mutters much, and delirium ensues. The fever continuing to increase still more in violence, symptoms of putrefaction show themselves; the breath becomes highly offensive; the urine deposits a black and fetid sediment; the stools are dark, offensive, and pass off insensibly; hæmorrhages issue from the gums, nostrils, mouth, and other parts of the body; livid spots or petechiæ appear on its surface; the pulse intermits and sinks; the extremities grow cold; hiccups ensue; and death at last closes the tragic scene.

When this fever does not terminate fatally, it generally begins, in cold climates, to diminish about the commencement of the third week, and goes off gradually towards the end of the fourth, without any very evident crisis; but in warm climates it seldom continues above a week or ten days, if so long.

Our opinion, as to the event, is to be formed by the degree of violence in the symptoms, particularly after petechiæ appear, although in some instances recoveries have been effected under the most unpromising appearances. An abatement of febrile heat and thirst, a gentle moisture diffused equally over the whole surface of the body, loose stools, turbid urine, rising of the pulse, and the absence of delirium and stupor, may be regarded in a favourable light. On the contrary, petechiæ, with dark, offensive, and involuntary discharges by urine and stool, fetid sweats, hæmorrhages, and hiccoughs, denote the almost certain dissolution of the patient.

The appearances usually perceived on dissection, are inflammations of the brain and viscera, but more particularly of the stomach and intestines, which are now and then found in a gangrenous state. In the muscular fibres there seems likewise a strong tendency to gangrene.

In the very early period of typhus fever it is often possible, by active treatment, to cut short the disease at once; but where it has established itself more firmly, we can only employ palliative measures to diminish its violence, that it may run safely through its course. Among the most likely means of accomplishing the first object is an emetic; where the fever runs high we may give antimonials in divided doses at short intervals till full vomiting is excited; or if there be less strength in the system, ipecacuanha in a full dose at once. Attention should next be paid to clear out the bowels by some sufficiently active form of medicine; and as the disease proceeds, we must keep up this function, and attempt to restore that of the skin, and the other secretions, as the best means of moderating the violence of vascular action. Some of the preparations of mercury, or if there be tolerable strength, those of antimony, assisted by the saline compounds, may be employed for this purpose. The general antiphlogistic regimen is to be observed in the early part of the disease, as explained under synocha. In cases where the skin is uniformly very hot and dry, the abstraction of caloric may be more actively made by means of the cold affusion, that is, throwing a quantity of cold water on the naked body of the patient; which measure has sometimes arrested the disease in its first stage: and when the power of the system is less, sponging the body occasionally with cold water, medicated, perhaps, with a little salt or vinegar, may be substituted as a milder proceeding. But where the evolution of heat is even deficient, such means would be highly improper; and it may be sometimes advisable to employ the tepid bath, to promote the operation of the diaphoretic medicines. If under the use of the measures already detailed, calculated to lessen the violence of vascular action, the vital powers should appear materially falling off, recourse must then be had to a more nutritious diet, with a moderate quantity of wine, and cordial or tonic medicines. There is generally an aversion from animal food, whence the mucilaginous vegetable substances, as arrow-root, &c. rendered palatable by spice, or a little wine, or sometimes mixed with milk, may be directed as nourishing and easy of digestion. If, however, there be no marked septic tendency, and the patient cloyed with these articles, the lighter animal preparations, as calves-foot jelly, veal broth, &c. may be allowed. The extent, to which wine may be carried, must depend on the urgency of the case, and the previous habits of the individual; but it will commonly not be necessary to exceed half a pint, or a pint at most, in the twenty-four hours; and it should be given in divided portions, properly diluted, made, perhaps, into negus, whey, &c. according to the liking of the patient. The preference should always be given to that which is of the soundest quality, if agreeable: but where wine cannot be afforded good malt liquor, or mustard whey may be substituted. Some moderately stimulant medicines, as ammonia, aromatics, serpentaria, &c. may often be used with advantage, to assist in keeping up the circulation: also those of a tonic quality, as calumba, cusparia, cinchona, &c. occasionally in their lighter forms; but more especially the acids. These are, in several respects, useful; by promoting the secretions of the primæ viæ, &c. they quench thirst, remove irritation, and manifestly cool the body; and in the worst forms of typhus, where the putrescent tendency appears, they are particularly indicated from their antiseptic power; they are also decidedly tonic, and indeed those from the mineral kingdom powerfully so. These may be given freely as medicines, the carbonic acid also in the form of brisk fermenting liquors; and the native vegetable acids, as they exist in ripe fruits, being generally very grateful, may constitute a considerable part of the diet. In the mean time to obviate the septic tendency, great attention should be paid to cleanliness and ventilation, and keeping the bowels regular by mild aperients, or clysters of an emollient or antiseptic nature: and where aphthæ appear, acidulated gargles should be directed. If the disease inclines more to the nervous form, with much mental anxiety, tremors, and other irregular affections of the muscles, or organs of sense, the antispasmodic medicines may be employed with more advantage, as æther, camphor, musk, &c. but particularly opium; which should be given in a full dose, sufficient to procure sleep, provided there be no appearances of determination of blood to the head; and it may be useful to call a greater portion of nervous energy to the lower extremities by the pediluvium, or other mode of applying warmth, or occasionally by sinapisms, not allowing these to produce vesication. But if there should be much increased vascular action in the brain, more active means will be required, even the local abstraction of blood, if the strength will permit; and it will be always right to have the head shaved, and kept cool by some evaporating lotion, and a blister applied to the back of the neck. In like manner other important parts may occasionally require local means of relief. Urgent vomiting may, perhaps, be checked by the effervescing mixture; a troublesome diarrhœa by small doses of opium, assisted by aromatics, chalk, and other astringents, or sometimes by small doses of ipecacuanha; profuse perspirations by the infusum rosæ, a cooling regimen, &c.

Ty′phus ægypti′acus. The plague of Egypt.

Ty′phus ca′rcerum. The jail-fever.

Ty′phus castre′nsis. The camp-fever.

Ty′phus gra′vior. The severe species of typhus.

Ty′phus ictero′des. Typhus with symptoms of jaundice.

Ty′phus mi′tior. The low fever.

Ty′phus nervo′sus. The nervous fever.

Ty′phus petechia′lis. Typhus with purple spots.

Tyri′asis. *Τυριασις.* A species of leprosy in which the skin may be easily withdrawn from the flesh.

Tyro′sis. (From *τυροω*, to coagulate.) A disorder of the stomach from milk curdled in it.

U.

ULCER. (*Ulcus*, from ελκος, a sore.) A purulent solution of continuity of the soft parts of an animal body. Ulcers may arise from a variety of causes, as all those which produce inflammation, from wounds, specific irritations of the absorbents, from scurvy, cancer, the venereal or scrophulous virus, &c. The proximate or immediate cause is an increased action of the absorbents, and a specific action of the arteries, by which a fluid is separated from the blood upon the ulcerated surface. They are variously denominated; the following is the most frequent division: 1. *The simple ulcer*, which takes place generally from a superficial wound. 2. The *sinuous*, that runs under the integuments, and the orifice of which is narrow, but not callous. 3. The *fistulous ulcer*, or *fistula*, a deep ulcer, with a narrow and callous orifice. 4. The *fungous ulcer*, the surface of which is covered with fungous flesh. 5. The *gangrenous*, which is livid, fetid, and gangrenous. 6. The *scorbutic*, which depends on a scorbutic acrimony. 7. The *venereal*, arising from the venereal disease. 8. The *cancerous ulcer*, or open cancer, (see *Cancer*.) 9. The *carious ulcer*, depending upon a carious bone. 10. The *inveterate ulcer*, which is of long continuance, and resists the ordinary applications. 11. The *scrophulous ulcer*, known by its having arisen from indolent tumours, its discharging a viscid, glairy matter, and its indolent nature.

Ulcerated sore throat. See *Cynanche.*

Ulma′ria. (From *ulmus*, the elm; so named because it has leaves like the elm.) See *Spiræa ulmaria.*

U′LMUS. 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Digynia.*

2. The pharmacopœial name of the common elm. See *Ulmus campestris.*

U′lmus campe′stris. The systematic name of the common elm. *Ulmus; foliis duplicato-serratis, basi inæqualibus*, of Linnæus. The inner tough bark of this tree, which is directed for use by the pharmacopœias, has no remarkable smell, but a bitterish taste, and abounds with a slimy juice, which has been recommended in nephritic cases, and externally as a useful application to burns. It is also highly recommended in some cutaneous affections allied to herpes and lepra. It is mostly exhibited in the form of decoction, by boiling four ounces in four pints of water to two pints; of which from four to eight ounces are given two or three times a day.

U′LNA. (From *ωλενη*, the ulna, or cubit.) *Cubitus.* The larger bone of the fore-arm. It is smaller and shorter than the os humeri, and becomes gradually smaller as it descends to the wrist. We may divide it into its upper and lower extremities, and its body or middle part. At its upper extremity are two considerable processes, of which the posterior one and largest is named *olecranon*, and the smaller and anterior one the *coronoid* process. Between these two processes, the extremity of the bone is formed into a deep articulating cavity, which, from its semi-circular shape, is called the *greater sigmoid cavity*, to distinguish it from another, which has been named the *lesser sigmoid cavity*. The olecranon begins by a considerable tuberosity, which is rough, and serves for the insertion of muscles, and terminates in a kind of hook, the concave surface of which moves upon the pulley of the os humeri. This process forms the point of the elbow. The coronoid process is sharper at its extremity than the olecranon, but is much smaller, and does not reach so high. In bending the arm it is received into the fossa at the fore-part of the pulley. At the external side of the coronoid process is the lesser sigmoid cavity, which is a small, semilunar, articulating surface, lined with cartilage, on which the round head of the radius plays. At the fore-part of the coronoid process we observe a small tuberosity, into which the tendon of the brachialis internus is inserted. The greater sigmoid cavity, the situation of which we just now mentioned, is divided into four surfaces by a prominent line which is intersected by a small sinuosity that serves for the lodgment of mucilaginous glands. The whole of this cavity is covered with cartilage. The body, or middle part of the ulna, is of a prismatic or triangular shape, so as to afford three surfaces and as many angles. The external and internal surfaces are flat and broad, especially the external one, and are separated by a sharp angle, which, from its situation, may be termed the internal angle. This internal angle, which is turned towards the radius, serves for the attachment of the ligament that connects the two bones, and which is therefore called the *interosseous* ligament. The posterior surface is convex, and corresponds with the olecranon. The borders, or angles, which separate it from the other two surfaces, are somewhat rounded. At about a third of the length of this bone from the top, in its fore-part, we observe a channel for the passage of vessels. The lower extremity is smaller as it descends, nearly cylindrical, and slightly curved forwards and outwards. Just before it terminates it contracts, so as to form a neck to the small head with which it ends. On the outside of this little head, answering to the olecranon, a small process, called the *styloid* process, stands out, from which a strong ligament is stretched to the wrist. The head has a rounded articulating surface, on its internal side, which is covered with cartilage, and received into a semi-lunar cavity formed at the lower end of the radius. Between it and the os cuneiforme, a moveable cartilage is interposed, which is continued from the cartilage that covers the lower end of the radius, and is connected by ligamentous fibres to the styloid process of the ulna. The ulna is articulated above with the lower end of the os humeri. This articulation is of the species called ginglymus, it is articulated also both above and below to the radius, and to the carpus at its lowest extremity. Its chief use seems to be to support and regulate the motions of the radius. In children, both extremities of this bone are first cartilaginous, and afterwards epiphyses, before they are completely united to the rest of the bone.

Ulnar artery. See *Cubital artery.*

Ulnar nerve. See *Cubital nerve.*

ULNA'RIS EXTE'RNUS. See *Extensor carpi ulnaris.*

ULNA'RIS INTE'RNUS. See *Flexor carpi ulnaris.*

UMBILICAL CORD. *Funis umbilicalis. Funiculus umbilicalis.* The navel-string. A cord-like substance of an intestinal form, about half a yard in length, that proceeds from the navel of the fœtus to the centre of the placenta. It is composed of a cutaneous sheath, cellular substance, one umbilical vein, and two umbilical arteries; the former conveys the blood to the child from the placenta, and the latter return it from the child to the placenta.

Umbilical hernia. See *Hernia umbilicalis.*

UMBILICAL REGION. *Regio umbilicalis.* The part of the abdominal parietes about two inches all round the navel.

UMBILI'CUS. The navel.

UMBILI'CUS MARI'NUS. *Cotyledon marina. Androsace. Acetabulum marinum. Androsace Matthioli. Fungus petræus marinus.* A submarine production found on rocks and the shells of fishes, about the coast of Montpellier, &c. It is said to be, in the form of powder, a useful anthelmintic and diuretic.

UNCIFORM BONE. (*Os unciforme*, from *uncus*, a hook, and *forma*, a likeness.) The last bone of the second row of the carpus or wrist; so named from its hooklike process, which projects towards the palm of the hand, and gives origin to the great ligament by which the tendons of the wrist are bound down. See *Bones.*

UNGUE'NTUM. (From *ungo*, to anoint.) An ointment. The usual consistence of ointments is about that of butter. The following are among the best formulæ.

UNGUE'NTUM CANTHA'RIDIS. See *Unguentum lyttæ.*

UNGUE'NTUM CETA'CEI. Ointment of spermaceti, formerly called *linimentum album*, and latterly *unguentum spermaceti*.

“Take of spermaceti, six drachms; white wax, two drachms; olive oil, three fluid ounces. Having melted them together over a slow fire, constantly stir the mixture until it gets cold.” A simple emollient ointment.

Ungue′ntum cicu′tæ. Hemlock ointment. “Take of the fresh leaves of hemlock, and prepared hog's lard, of each four ounces. The cicuta is to be bruised in a marble mortar, after which the lard is to be added, and the two ingredients thoroughly incorporated by beating. They are then to be gently melted over the fire, and after being strained through a cloth, and the fibrous parts of the hemlock well pressed, the ointment is to be stirred till quite cold.” To cancerous or scrophulous sores this ointment may be applied with a prospect of success.

Ungue′ntum e′lemi compo′situm. Compound ointment of elemi, formerly called *linimentum arcæi* and *unguentum e gummi elemi.* “Take of elemi, a pound; common turpentine, ten ounces; prepared suet, two pounds; olive oil, two fluid ounces. Melt the elemi with the suet, then remove it from the fire, and immediately mix in the turpentine and oil, then strain the mixture through a linen cloth.” Indolent ulcers, chilblains, chronic ulcers after burns, and indolent tumours are often removed by this ointment.

Ungue′ntum hydra′rgyri fo′rtius. Strong mercurial ointment, formerly called *unguentum cæruleum fortius.* “Take of purified mercury, two pounds; prepared lard, twenty-three ounces; prepared suet, an ounce. First rub the mercury with the suet and a little of the lard, until the globules disappear; then add the remainder of the lard, and mix.” In very general use for mercurial frictions. It may be employed in almost all cases where mercury is indicated.

Ungue′ntum hydra′rgyri mi′tius. Mild mercurial ointment, formerly called *unguentum cæruleum mitius.* “Take of strong mercurial ointment, a pound; prepared lard, two pounds. Mix.” Weaker than the former.

Ungue′ntum hydra′rgyri nitra′tis. *Unguentum hydrargyri nitrati.* Ointment of nitrate of mercury. “Take of purified mercury, an ounce; nitric acid, eleven fluid drachms; prepared lard, six ounces; olive oil, four fluid ounces. First dissolve the mercury in the acid, then, while the liquor is hot, mix it with the lard and oil melted together.” A stimulating and detergent ointment. Tinea capitis, psorophthalmia, indolent tumours on the margin of the eye-lid, and ulcers in the urethra, are cured by its application.

Ungue′ntum hydra′rgyri nitra′tis mi′tius. Weaker only than the former.

Ungue′ntum hydra′rgyri nitrico-o′xydi. Ointment of nitric oxyde of mercury. “Take of nitric oxyde of mercury, an ounce; white wax, two ounces; prepared lard, six ounces. Having melted together the wax and lard, add thereto the nitric oxyde of mercury in very fine powder and mix.” A most excellent stimulating and escharotic ointment.

Ungue′ntum hydra′rgyri præcipita′ti albi. Ointment of white precipitate of mercury, formerly called *unguentum e mercurio præcipitato albo,* and latterly *unguentum calcis hydrargyri albæ.* “Take of white præcipitate of mercury, a drachm; prepared lard, an ounce and half. Having melted the lard over a slow fire, add the precipitated mercury and mix.” A useful ointment to destroy vermin in the head, and to assist in the removal of scald head, venereal ulcers of children, and cutaneous eruptions.

Ungue′ntum ly′ttæ. *Unguentum cantharidis.* Ointment of the blistering-fly. “Take of the blistering-fly, rubbed to a very fine powder, two ounces; distilled water, eight fluid ounces; resin cerate, eight ounces; Boil the water with the blistering-fly to one half, and strain; mix the cerate with the liquor, and then let it evaporate to the proper consistence.” This is sometimes used to keep a blister open; but the savine cerate is to be preferred.

Ungue′ntum ophtha′lmicum. Ophthalmic ointment of Janin. “Take of prepared hog's-lard, half an ounce; prepared tutty, Armenian bole, of each two drachms; white precipitate, one drachm. Mix.” This celebrated ointment may be used for the same diseases of the eye and eyelid as the ung. hydrarg. nitratis. It must be at first weakened with about twice its quantity of hog's-lard.

Ungue′ntum pi′cis a′ridæ. See *Unguentum resinæ nigræ.*

Ungue′ntum pi′cis li′quidæ. Tar ointment, formerly called *unguentum picis; unguentum e pice.* “Take of tar, prepared suet, of each, a pound. Melt them together, and strain the mixture through a linen cloth.” This is applicable to cases of tinea capitis, and some eruptive complaints; also to some kinds of irritable sores.

Ungue′ntum resi′næ fla′væ. Yellow basilicon is in general use as a stimulant and detersive; it is an elegant and useful form of applying the resin.

Ungue′ntum resi′næ ni′græ. *Unguentum picis aridæ.* Pitch ointment, formerly called *unguentum basilicum nigrum* vel *tetrapharmacum.* “Take of pitch, yellow wax, yellow resin, of each nine ounces; olive oil, a pint. Melt them together, and strain the mixture through a linen cloth.” This is useful for the same purposes as the tar ointment.

Ungue′ntum sambu′ci. Elder ointment, formerly called *unguentum sambucinum.* “Take of elder flowers, two pounds;

prepared lard, two pounds. Boil the elder flowers in the lard until they become crisp, then strain the ointment through a linen cloth." A cooling and emollient preparation.

Ungue′ntum su′lphuris. Sulphur ointment, formerly called *unguentum e sulphure*. "Take of sublimed sulphur, three ounces; prepared lard, half a pound. Mix." The most effectual preparation to destroy the itch. It is also serviceable in the cure of other cutaneous eruptions.

Ungue′ntum su′lphuris compo′situm. Compound sulphur ointment. "Take of sublimed sulphur, half a pound; white hellebore root, powdered, two ounces; nitrate of potash, a drachm; soft soap, half a pound; prepared lard, a pound and half. Mix." This preparation is introduced into the last London pharmacopœia as a more efficaceous remedy for itch than common sulphur ointment. In the army, where it is generally used, the sulphur vivum, or native admixture of sulphur with various heterogeneous matters, is used instead of sublimed sulphur.

Ungue′ntum vera′tri. White hellebore ointment, formerly called *unguentum hellebori albi*. "Take of white hellebore root, powdered, two ounces; prepared lard, eight ounces; oil of lemons, twenty minims. Mix."

Ungue′ntum zi′nci. Zinc ointment. "Take of the oxyde of zinc, an ounce; prepared lard, six ounces. Mix." A very useful application to chronic ophthalmia and relaxed ulcers.

U′NGUIS. (From *ονυξ*, a hook.)

1. The nail. The nails are horny laminæ situated at the extremities of the fingers and toes.

2. An abscess or collection of pus between the lamellæ of the cornea transparens of the eye; so called from its resemblance to the lunated portion of the nail of the finger.

3. The lachrymal bone is so named from its resemblance to a nail of the finger.

U′ngula caballi′na. See *Tussilago*.

Unio′nes. (*Unio*, pl. *uniones*, from *unus*, one; so called because there is never more than one found in the same shell, or according to others, for that many being found in one shell not any one of them is like the other.) Pearls. See *Margarita*.

U′RACHUS. (From *ουρον*, urine, and *εχω*, to contain.) *Urinaculum*. The ligamentous cord that arises from the basis of the urinary bladder, which it runs along, and terminates in the umbilical cord. In the fœtuses of brute animals, which the antients mostly dissected, it is a hollow tube and conveys the urine to the allantoid membrane.

Ura′gium. (From *ουραγός*, the hinder part of an army.) The apex or extreme point of the heart.

Uranis′cus. (From *ουρανος*, the firmament; so called from its arch.) The palate.

URA′NIUM. This metal was discovered by Klaproth in the year 1789. It exists combined with sulphur, and a portion of iron, lead, and silex, in the mineral termed *Pechblende*, or *oxyde of uranium*. Combined with carbonic acid it forms the *chalcolite*, or *green mica:* and mixt with oxyde of iron, it constitutes the *uranitic ochre*. It is always found in the state of an oxyde with a greater or smaller portion of iron, or mineralized with sulphur and copper. The ores of uranium are of a blackish colour, inclining to a dark iron grey, and of a moderate splendour; they are of a close texture, and when broken present a somewhat uneven, and in the smallest particles a conchoidal surface. They are found in the mines of Saxony.

Properties of Uranium.—Uranium exhibits a mass of small metallic globules, agglutinated together. Its colour is a deep grey on the outside, in the inside it is a pale brown. It is very porous, and is so soft, that it may be scraped with a knife. It has but little lustre. Its specific gravity is between eight and nine. It is more difficult to be fused than even manganese. When intensely heated with phosphate of soda and ammonia, or glacial phosphoric acid, it fuses with them into a grass-green glass. With soda or borax it melts only into a grey, opake, scoriaceous bead. It is soluble in sulphuric, nitric, and muriatic acids. It combines with sulphur and phosphorus, and alloys with mercury. It has not yet been combined with other combustible bodies. It decomposes the nitric acid and becomes converted into a yellow oxyde. The action of uranium alone upon water, &c. is still unknown, probably on account of its extreme scarcity.

Method of obtaining Uranium.—In order to obtain uranium, the *pechblende* is first freed from sulphur by heat, and cleared from the adhering impurities as carefully as possible. It is then digested in nitric acid; the metallic matter that it contains is thus completely dissolved, while part of the sulphur remains undissolved, and part of it is dissipated under the form of sulphuretted hydrogen gas. The solution is then precipitated by a carbonated alkali. The precipitate has a lemon-yellow colour when it is pure. This yellow carbonate is made into a paste with oil, and exposed to a violent heat, bedded in a crucible well lined with charcoal.

Klaproth obtained a metallic globule 28 grains in weight, by forming a ball of 50 grains of the yellow carbonate with a little wax, and by exposing this ball in a crucible lined with charcoal to a heat equal to 170° of Wedgewood's pyrometer.

Richter obtained in a single experiment 100 grains of this metal, which seemed to be free from all admixture.

Urce′ola. (From *urceolus*, a small pitcher; so named from its uses in scowering glazed vessels.) The herb fever-few.

Ure′do. (From *uro*, to burn.) An itching or burning sensation of the skin, which accompanies many diseases. The nettle-rash is also so called.

URETER. (From *ουρον*, urine.) The membranous canal which conveys the urine from the kidney to the urinary bladder; at its superior part it is considerably the largest, occupying the greatest portion of the pelvis of the kidney; it then contracts to the size of a goose-quill, and descends over the psoas magnus muscle and large crural vessels into the pelvis, in which it perforates the urinary bladder very obliquely. Its internal surface is lubricated with mucus to defend it from the irritation of the urine in passing.

URETERI′TIS. (From *ουρητηρ*, the ureter.) An inflammation of the ureter.

Urete′ricus. (From *ουρητηρ*, the ureter, or *ουρητηριτις*, an inflammation of the ureter.) Applied to an ischury, or suppression of urine, from an inflammation of the ureter.

Ureteroli′thicus. (From *ουρητηρ*, the ureter, and *λιθος*, a stone.) Applied to an ischury from a stone in the ureter.

Ureterothromboi′des. (From *ουρητηρ*, the ureter, *θρομϐος*, grumous blood, and *ειδος*, a likeness.) Applied to an ischury from grumous blood in the ureter.

Ureterophlegma′ticus. (From *ουρητηρ*, the ureter, and *φλεγμα*, phlegm.) Applied to a suppression of urine from pituitous matter in the ureter.

Ureteropy′icus. (From *ουρητηρ*, the ureter, and *ϖυον*, pus.) Applied to an ischury from purulent matter in the ureter.

Ureterostoma′ticus. (From *ουρητηρ*, the ureter, and *ϛομα*, a mouth.) Applied to a suppression of urine from an obstruction in the lower orifice of the ureter.

URE′THRA. (From *ουρον*, the urine; because it is the canal through which the urine passes.) A membranous canal running from the neck of the bladder through the inferior part of the penis to the extremity of the glans penis, in which it opens by a longitudinal orifice, called *meatus urinarius*. In this course it first passes through the prostate gland, which portion is distinguished by the name of the *prostatical urethra*; it then becomes much dilated, and is known by the name of the *bulbous part*, in which is situated a cutaneous eminence called the *caput gallinaginis* or *verumontanum*, around which are ten or twelve orifices of the excretory ducts of the prostate gland, and two of the spermatic vessels. The remaining part of the urethra contains a number of triangular mouths, which are the *lacunæ*, or openings of the excretory ducts of the mucous glands of the urethra.

Urethralmi′nthicus. (From *ουρηθρα*, the urethra, and *ελμινθες*, worms.) Applied to an ischury from worms in the urethra.

Urethri′ticus. (From *ουρηθριτις*, an inflammation of the urethra.) Applied to a suppression of urine from an inflammation of the urethra.

URETHRI′TIS. From *ουρηθρα*, the urethra.) An inflammation in the urethra. See *Gonorrhœa*.

Urethrohymeno′des. (From *ουρηθρα*, the urethra, and *υμην*, a membrane.) Applied to an ischury from a membrane obstructing the urethra.

Urethroli′thicus. (From *ουρηθρα*, the urethra, and *λιθος*, a stone.) Applied to a suppression of urine from a stone in the urethra.

Urethrombo′ides. (From *ουρηθρα*, the urethra, and *θρομϐοιδης*, like a grumous concretion.) A caruncle in the urethra.

Urethrophlegma′ticus. (From *ουρηθρα*, the urethra, and *φλεγμα*, phlegm.) Applied to an ischury from mucus obstructing the urethra.

Urethro-py′icus. (From *ουρηθρα*, the urethra, and *ϖυον*, pus.) Applied to a suppression of urine from pus collected in the urethra.

Ure′tica. (From *ουρον*, urine.) Medicines, which promote a discharge of urine.

U′rias. (From *ουρον*, urine.) The urethra.

URINARY BLADDER. *Vesica Urinaria.* The bladder is a membranous pouch, capable of dilatation and contraction, situated in the lower part of the abdomen, immediately behind the symphysis pubis, and opposite to the beginning of the rectum. Its figure is nearly that of a short oval. It is broader on the fore and back, than on the lateral parts; rounder above than below, when empty; and broader below than above, when full. It is divided into the body, neck, and fundus, or upper part; the neck is a portion of the lower part, which is contracted by a sphincter muscle. This organ is made up of several coats, the upper, posterior, and lateral parts are covered by a reflection of the peritoneum; which is connected by cellular substance to the muscular coat. This is composed of several strata of fibres, the outermost of which are mostly longitudinal, the interior becoming gradually more transverse, connected together by reticular membrane. Under this is the cellular coat, which is nearly of the same structure with the tunica nervosa of the stomach. Winslow describes the internal or villous coat as somewhat granulated and glandular; but this has been disputed by subsequent anatomists. However, a mucous fluid is poured out continually from it, which defends it from the acrimony of the urine. Sometimes the internal surface is found very irregular, and full of rugæ, which appear to be occasioned merely by the strong contraction of the muscular fibres, and may be removed by distending it. The sphincter does not seem to be a distinct muscle, but merely formed by the transverse fibres being closely arranged about the neck. The urine is received from the ureters, which enter the posterior part of the bladder obliquely; and when a certain degree of distention has occurred, the muscular fibres are voluntarily exerted to expel it.

URINE. (*Urina*; ουρον, from ορουω, to rush out.) The saline liquid, secreted in the kidneys, and dropping down from them, guttatim, through the ureters, into the cavity of the urinary bladder. *The secretory organ* is composed of the arterious vessels of the cortical substance of the kidneys, from which the urine passes through the uriniferous tubuli and renal papillæ, into the renal pelvis: whence it flows drop by drop, through the ureters, into the cavity of the urinary bladder: where it is detained some hours, and at length, when *abundant*, eliminated through the urethra. The urine of an healthy man is divided in general into,

1. *Crude*, or that which is emitted one or two hours after eating; this is for the most part aqueous, and often vitiated by some kinds of food.

2. *Cocted*, which is eliminated some hours after the digestion of the food, as that which is emitted in the morning after sleeping. This is generally in smaller quantity, thicker, more coloured, more acrid than at any other time. Of such cocted urine, the *colour* is usually citrine, and not unhandsome.

The *degree of heat* agrees with that of the blood; hence in atmospheric air it is warmer, as is perceived if the hand be washed with urine. The *specific gravity* is greater than water, and that emitted in the morning is always heavier than at any other time. The *smell* of fresh urine is not disagreeable. The *taste* is saltish and nauseous. The *consistence* is somewhat thicker than water. The *quantity* depends on that of the liquid drink, its diuretic nature, and the temperature of the air.

Changes of urine in the air.—Preserved in an open vessel, it remains pellucid for some time, and at length there is perceived at the bottom, a *nubecula*, or little cloud, consolidated as it were from the gluten. This nubecula increases by degrees, occupies all the urine, and renders it opake. The natural smell is changed into a putrid *cadaverous* one; and the surface is now generally covered with a *cuticle*, composed of very minute crystals. At length the urine regains its transparency, and the *colour* is changed from a yellow to a brown; the cadaverous smell passes into an *alkaline*; and a brown, grumous *sediment* falls to the bottom, filled with white particles, deliquescing in the air, and so conglutinated as to form, as it were, little soft calculi.

Thus *two sediments* are distinguishable in the urine; the *one* white and gelatinous, and separated in the beginning; the *other* brown and grumous, deposited by the urine when putrid.

Spontaneous degeneration.—Of all the fluids of the body, the urine first putrefies. In summer, after a few hours it becomes turbid, and sordidly black; then deposits a copious sediment, and exhales a fetor, like that of putrid cancers, which, at length becomes cadaverous. Putrid urine effervesces with acids, and if distilled, gives off, before water, an urinous volatile spirit.

The properties of healthy urine, are,

1. Urine reddens paper stained with turnsole and with the juice of raddishes, and therefore contains an acid. This acid has been generally considered as the phosphoric, but Thenard has shown that in reality it is the *acetic*.

2. If a solution of ammonia be poured into fresh urine, a white powder precipitates, which has the properties of *phosphate of lime*.

3. If the phosphate of lime precipitated from urine be examined, a little magnesia will be found mixed with it. Fourcroy and Vauquelin have ascertained that this is owing to a little *phosphate of magnesia* which urine contains, and which is decomposed by the alkali employed to precipitate the phosphate of lime.

4. Proust informs us that *carbonic acid* exists in urine, and that its separation occasions the froth which appears during the evaporation of urine.

5. Proust has observed, that urine kept in new casks deposits small crystals, which effloresce in the air, and fall to powder. These crystals possess the properties of the *carbonate of lime*.

6. When fresh urine cools, it often lets fall a brick-coloured precipitate, which Scheele first ascertained to be crystals of *uric acid*. All urine contains this acid even when no sensible precipitate appears when it cools.

7. During intermitting fevers, and especially during diseases of the liver, a copious sediment of a brick-red colour is deposited from urine. This sediment contains the *rosacic acid* of Proust.

8. If fresh urine be evaporated to the consistence of a syrup, and muriatic acid be then poured into it, a precipitate appears which possesses the properties of *benzoic acid*.

9. When an infusion of tannin is dropped into urine, a white precipitate appears, having the properties of the combination of tannin and *albumen* or gelatine. Their quantity in healthy urine is very small, often indeed not sensible. Cruickshanks found

that the precipitate afforded by tannin in healthy urine amounted to 1-240th part of the weight of the urine.

10. If urine be evaporated by a slow fire to the consistence of a thick syrup, it assumes a deep brown colour, and exhales a fœtid ammoniacal odour. When allowed to cool, it concretes into a mass of crystals, composed of all the component parts of urine. If four times its weight of alkohol be poured into this mass, at intervals, and a slight heat be applied, the greatest part is dissolved. The alkohol which has acquired a brown colour is to be decanted off, and distilled in a retort in a sand heat till the mixture has boiled for some time and acquired the consistence of a syrup. By this time the whole of the alkohol has passed off, and the matter, on cooling, crystallizes in quadrangular plates, which intersect each other. This substance is *urea*, which composes 9-20ths of the urine, provided the watery part be excluded. It is this substance which characterizes urine, and constitutes it what it is, and to which the greater part of the very singular phenomena of urine are to be ascribed.

11. According to Fourcroy and Vauquelin, the colour of urine depends upon the urea; the greater the proportion of urea the deeper the colour. But Proust has detected a *resinous matter* in urine similar to the resin of bile, and to this substance he ascribes the colour of urine.

12. If urine be slowly evaporated to the consistence of a syrup, a number of crystals make their appearance on its surface, these possess the properties of the *muriate of soda*.

13. The saline residuum which remains after the separation of urea from crystallized urine by means of alkohol, has been long known by the names of *fusible salt of urine*, and *microcosmic salt*. When these salts are examined, they are found to have the properties of phosphates. The rhomboidal prisms consist of *phosphate of ammonia* united to a little *phosphate of soda*, the rectangular tables, on the contrary, are phosphate of soda united to a small quantity of phosphate of ammonia, urine then contains *phosphate of soda*, and *phosphate of ammonia*.

14. When urine is cautiously evaporated, a few cubic crystals are often deposited among the other salts, these crystals have the properties of *muriate of ammonia*.

15. When urine is boiled in a silver basin, it blackens the basin, and if the quantity of urine be large, small crusts of sulphuret of silver may be detached. Hence we see that urine contains *sulphur*.

Urine then contains the following substances;

1. Water.
2. Acetic acid.
3. Phosphate of lime.
4. Phosphate of magnesia.
5. Carbonic acid.
6. Carbonate of lime.
7. Uric acid.
8. Rosacic acid.
9. Benzoic acid.
10. Albumen.
11. Urea.
12. Resin.
13. Muriate of soda.
14. Phosphate of soda.
15. Phosphate of ammonia.
16. Muriate of ammonia.
17. Sulphur.

No liquor in the human body, however, is so variable, in respect to *quantity* and *quality*, as the urine; for it varies,

1. *In respect to age:* in the *fœtus* it is inodorous, insipid, and almost aqueous; but as the *infant* grows, it becomes more acrid and fœtid; and in *old age* more particularly so.

2. *In respect to drink:* it is secreted in greater quantity, and of a more pale colour, from cold and copious draughts. It becomes green from an infusion of Chinese tea.

3. *In respect to food:* from eating the heads of asparagus, or olives, it contracts a peculiar smell; from the fruit of the opuntia, it becomes red; and from fasting, turbid.

4. *In respect to medicines:* from the exhibition of rhubarb root, it becomes yellow; from cassia pulp, green; and from turpentine it acquires a violet odour.

5. *In respect to the time of the year:* in the winter the urine is more copious and aqueous; but in the summer, from the increased transpiration, it is more sparing, higher coloured, and so acrid that it sometimes occasions strangury. The climate induces the same difference.

6. *In respect of the muscular motion of the body:* it is secreted more sparingly, and concentrated by motion; and is more copiously diluted, and rendered more crude by rest.

7. *In respect of the affections of the mind:* thus fright makes the urine pale.

Use.—The urine is an excrementitious fluid, like lixivium, by which the human body is not only liberated from the superfluous water, but also from the superfluous salts, and animal earth; and is defended from corruption.

Lastly, the vis medicatrix naturæ sometimes eliminates many morbid and acrid substances with the urine; as may be observed in fevers, dropsies, &c.

URINE, RETENTION OF. A want of the ordinary secretion of urine. In retention of urine there is none secreted: in a suppression, the urine is secreted but cannot be voided.

Urine, suppression of. See *Ischuria.*

URI'NA. See *Urine.*

URINA'CULUM. See *Urachus.*

URI'NÆ A'RDOR. See *Dysuria.*

URINA'RIA. (From *urina*, urine; so

named from its diuretic qualities.) The herb dandelion. See *Leontodon Taraxacum.*

Urocri′sia. (From *ουρον*, urine, and *κρινω*, to judge.) The judgment formed of diseases by the inspection of urine.

Urorrhæ′a. (From *ουρον*, the urine, and *ρεω*, to flow.) A discharge of the urine through the eroded perinæum.

Ursi′na ra′dix. The root of the plant called baldmoney. See *Æthusa meum.*

Urosco′pia. (From *ουρον*, the urine, and *σκοπεω*, to inspect.) Inspection of urine, that a judgment of diseases may be made from its appearance.

URTI′CA. (*Ab urendo;* because it excites an itching and pustules like those produced by fire.) 1. The name of a genus of plants in the Linnæan system. Class, *Monoecia.* Order, *Tetrandria.* The nettle.

2. The pharmacopœial name of the common nettle. See *Urtica dioica.*

Urti′ca dioi′ca. The systematic name of the common stinging-nettle. This plant is well known, and though generally despised as a noxious weed, has been long used for medical, culinary, and economical purposes. The young shoots in the spring possess diuretic and antiscorbutic properties, and are with these intentions boiled and eaten instead of cabbage greens.

Urti′ca mo′rtua. See *Lamium album.*

Urti′ca piluli′fera. The systematic name of the pillbearing nettle. *Urtica Romana.* The plant which bears this name in the pharmacopœias is the *Urtica pilulifera*, of Linnæus. The seed was formerly given against diseases of the chest, but is now deservedly forgotten. To raise an irritation in paralytic limbs the fresh plant may be employed as producing a more permanent sting than the common nettle.

Urti′ca Roma′na. See *Urtica pilulifera.*

Urti′ca u′rens. The systematic name of a lesser nettle than the dioica, and possessing similar virtues.

URTICA′RIA. (From *urtica*, a nettle.) *Febris urticata. Uredo. Purpura urticata. Scarlatina urtica.* The nettle-rash. A species of exanthematous fever, known by pyrexia and an eruption on the skin like that produced by the sting of the nettle. The little elevations, called the nettle-rash, often appear instantaneously, especially if the skin be rubbed or scratched, and seldom stay many hours in the same place, and sometimes not many minutes. No part of the body is exempt from them; and where many of them rise together, and continue an hour or two, the parts are often considerably swelled, which particularly happens in the arms, face, and hands. These eruptions will continue to infest the skin, sometimes in one place and sometimes in another, for one or two hours together, two or three times a day, or perhaps for the greatest part of twenty-four hours. In some constitutions they last only a few days, in others many months.

URTICA′TIO. (From *urtica*, a nettle.) The whipping a paralytic or benumbed limb with nettles, in order to restore its feelings.

U′snea. *Muscus cranii humani.* See *Lichen saxatilis.*

Utera′ria. (From *uterus*, the womb.) Medicines appropriated to diseases of the womb.

Uterine fury. See *Nymphomania.*

UTERUS. *Υστερα. Matrix. Ager naturæ. Hystera. Metra. Utriculus.* The womb. A spongy receptacle resembling a compressed pear, situated in the cavity of the pelvis, above the vagina, and between the urinary bladder and rectum.

The form of the uterus resembles that of an oblong pear flattened, with the depressed sides placed towards the ossa pubis and sacrum; but, in the impregnated state, it becomes more oval, according to the degree of its distension. For the convenience of description, and for some practical purposes, the uterus is distinguished into three parts, The fundus, the body, and the cervix; the upper part is called the fundus, the lower the cervix, the space between them, the extent of which is undefined, the body. The uterus is about three inches in length, about two in breadth at the fundus, and one at the cervix. Its thickness is different at the fundus and cervix, being at the former usually rather less than half an inch, and at the latter somewhat more; and this thickness is preserved throughout pregnancy, chiefly by the enlargement of the veins and lymphatics; there being a smaller change in the size of the arteries. But there is so great a variety in the size and dimensions of the uterus in different women, independent of the states of virginity, marriage, or pregnancy, as to prevent any very accurate mensuration. The cavity of the uterus corresponds with the external form; that of the cervix leads from the os uteri, where it is very small, in a straight direction, to the fundus, where it is expanded into a triangular form, with two of the angles opposed to the entrance into the Fallopian tubes; and at the place of junction between the cervix and the body of the uterus the cavity is smaller than it is in any other part. There is a swell or fulness of all the parts towards the cavity, which is sometimes distinguished by a prominent line running longitudinally through its middle. The villous coat of the vagina is reflected over the os uteri, and is continued into the membrane which lines the cavity of the uterus. The internal surface of the uterus is corrugated in a beautiful manner, but the rugæ, or wrinkles which are longitudinal, lessen as they advance into the uterus, the fundus of which is smooth. In the intervals between the rugæ are small orifices, like those in the vagina, which discharge a mucus, serving, besides other purposes, that of closing the os uteri very curiously and perfectly during pregnancy. The substance of the uterus, which is very firm, is composed of arteries, veins, lymphatics, nerves, and muscular fibres, curiously interwoven and connected together by cellular membrane. The muscular fibres are of a pale colour, and appear also in their texture somewhat different from muscular fibres in other parts of the body. The arteries of the uterus are the spermatic and hypogastric. The spermatic arteries arise from the anterior part of the aorta, a little below the emulgents, and sometimes from the emulgents. They pass over the psoæ muscles behind the peritonæum, enter between the two laminæ or duplicatures of the peritonæum which form the broad ligaments of the uterus, and proceed to the uterus, near the fundus of which they insinuate themselves, giving branches in their passage to the ovaria and Fallopian tubes. The hypogastric arteries are on each side a considerable branch of the internal iliacs. They pass to the sides of the body of the uterus, sending off a number of smaller branches, which dip into its substance. Some branches also are reflected upwards to the fundus uteri, which anastomose with the spermatic arteries, and others are reflected downwards, supplying the vagina. The veins which reconduct the blood from the uterus are very numerous, and their size in the unimpregnated state is proportioned to that of the arteries; but their enlargement during pregnancy is such, that the orifices of some of them, when divided, will admit even of the end of a small finger. The veins anastomose in the manner of the arteries which they accompany out of the uterus, and then, having the same names with the arteries, spermatic and hypogastric, the former proceeds to the vena cava on the right side, and on the left to the emulgent vein; and the latter to the internal iliac.

From the substance and surfaces of the uterus an infinite number of lymphatics arise, which follow the course of the hypogastric and spermatic blood-vessels. The first pass into the gland of the internal iliac plexus, and the other into the glands which are situated near the origin of the spermatic arteries. Of these Nuck first gave a delineation.

The uterus is supplied with nerves from the lower mesocolic plexus, and from two small flat circular ganglions, which are situated behind the rectum. These ganglions are joined by a number of small branches from the third and fourth sacral nerves. The ovaria derive their nerves from the renal plexus. By the great number of nerves these parts are rendered very irritable, but it is by those branches which the uterus receives from the intercostal, that the intimate consent between it and various other parts is chiefly preserved. The muscular fibres of the uterus have been described in a very different manner by anatomists, some of whom have asserted that its substance was chiefly muscular, with fibres running in transverse, orbicular, or reticulated order, whilst others have contended that there were no muscular fibres whatever in the uterus. In the unimpregnated uterus, when boiled for the purpose of a more perfect examination, the former seems to be a true representation; and when the uterus is distended towards the latter part of pregnancy, these fibres are very thinly scattered; but they may be discovered in a circular direction, at the junction between the body and the cervix of the uterus, and surrounding the entrance of each Fallopian tube in a similar order. Yet it does not seem reasonable to attribute the time of labour to its muscular fibres only, if we are to judge of the power of a muscle by the number of fibres of which it is composed, unless it is presumed that those of the uterus are stronger than in common muscles. With respect to the glands of the uterus, none are discoverable dispersed through its substance upon the inner surface of the cervix; between the rugæ there are lacunæ which secrete mucus, and there are small follicles at the edge of the os uteri. These last are only observable in a state of pregnancy, when they are much enlarged. From the angles at the fundus of the uterus, two processes of an irregular round form originate, called from the name of the first describer, the *Fallopian tubes*. They are about three inches in length, and, becoming smaller in their progress from the uterus, have an uneven, fringed termination, called the fimbriæ. The canal which passes through these tubes is extremely small at their origin, but it is gradually enlarged, and terminates with a patulous orifice, the diameter of which is about one-third of an inch, surrounded by the fimbriæ. It is also lined by a very fine vascular membrane, formed into serpentine plicæ. Through this canal, the communication between the uterus and ovaria is preserved. The Fallopian tubes are wrapped in duplicatures of the peritonæum, which are called the broad ligaments of the uterus; but a portion of their extremities, thus folded, hangs loose on each side of the pelvis. From each lateral angle of the uterus, a little before and below the Fallopian tubes, the *round ligaments* arise, which are composed of arteries, veins, lymphatics, nerves, and a fibrous structure. These are connected together by cellular membrane, and the whole is much enlarged during pregnancy. They receive their outward covering from the peritonæum, and pass out of the pelvis through the ring of the external oblique muscle to the groin, where the vessels subdivide into small branches, and terminate at the mons veneris and contiguous parts. From the insertion of these ligaments into the groin, the reason appears why that part generally suffers in all the diseases and affections of the uterus, and why the inguinal glands are in women so often found in a morbid or enlarged state. The duplicatures of the peritonæum, in which the Fallopian tubes and ovaria are involved, are called the *broad ligaments* of the uterus. These prevent the entanglement of the parts, and are conductors of the vessels and nerves as the mesentery is of those of the intestines. Both the round and broad ligaments alter their position during pregnancy, appearing to rise lower and more forward than in the unimpregnated state. Their use is supposed to be that of preventing the descent of the uterus, and to regulate its direction when it ascends into the cavity of the abdomen; but whether they answer these purposes may be much doubted. The use of the womb is for menstruation, conception, nutrition of the fœtus, and parturition. The uterus is liable to many diseases, the principal of which are *prolapsus uteri*, *procidentia uteri*, hydatids, dropsy of the uterus or tympanites uteri, moles, ulceration, &c.

UTERUS, RETROVERSION OF. By the term retroversion, such a change of the position of the uterus is understood, that the fundus is turned backwards and downwards upon its cervix, between the vagina and rectum, and the os uteri is turned forwards to the pubis, and upwards in proportion to the descent of the fundus, so that by an examination *per vaginam*, it cannot be felt, or not without difficulty, when the uterus is retroverted. By the same examination there may also be perceived a large round tumour, occupying the inferior part of the cavity of the pelvis, and pressing the vagina towards the pubes. By an examination *per anum*, the same tumour may be felt, pressing the rectum to the hollow of the sacrum, and if both these examinations are made at the same time, we may readily discover that the tumour is confined within the vagina and rectum. Besides the knowledge of the retroversion which may be gained by these examinations, it is found to be accompanied with other very distinguishing symptoms. There is in every case, together with extreme pain, a suppression of urine; and by the continuance of this distension of the bladder the tumour formed by it in the abdomen often equals in size, and resembles in shape, the uterus in the sixth or seventh months of pregnancy; but it is necessary to observe, that the suppression of urine is frequently absolute only before the retroversion of the uterus, or during the time it is retroverted; for when the retroversion is completed, there is often a discharge of urine, so as to prevent an increase of the distension of the bladder, though not in a sufficient quantity to remove it. There is also an obstinate constipation of the bowels, produced by the pressure of the retroverted uterus upon the rectum, which renders the injection of a clyster very difficult, or even impossible. But it appears that all the painful symptoms are chiefly in consequence of the suppression of urine; for none of those parts which are apt to sympathise in affections or diseases of the uterus are disturbed by its retroversion. The retroversion of the uterus has generally occurred about the third month of pregnancy, and sometimes after delivery it may likewise happen, where the uterus is, from any cause, enlarged to the size it acquires about the third month of pregnancy, but not with such facility as in the pregnant state, because the enlargement is then chiefly at the fundus. If the uterus is but little enlarged, or if it be enlarged beyond a certain time, it cannot well be retroverted; for, in the first case, should the cause of a retroversion exist, the weight at the fundus would be wanting to produce it; and in the latter the uterus would be raised above the projection of the sacrum, and supported by the spine.

UTRICA'RIA. (From *uter*, a bottle; so named from its appendages at the end of the leaves resembling bottles, to contain water.) A name of the nepenthes, or wonderful plant.

UTRI'CULUS. (Dim. of *uter*, a bottle; so called from its shape.) The womb.

U'VA. (*Quasi uvida*, from its juice.) An unripe grape. A tumour on the eye resembling a grape.

U'VA GRUI'NA. Crane-berries. They are brought from New England, and are reckoned antiscorbutic.

U'VA PA'SSA MA'JOR. The raisin. See *Vitis vinifera*.

U'VA PA'SSA MI'NOR. The dried currant. See *Vitis corinthica*.

U'VA U'RSI. Bear's whortle-berry. See *Arbutus*.

U'VEA. (From *uva*, an unripe grape.) The posterior lamina of the iris; so called because, in beasts, which the antients chiefly dissected, it is of the colour of unripe grapes.

U'VULA. (Dim. of *uva*, a grape.) *Columella*. *Cion*. *Gargareon*. *Columna oris*. *Gurgulio*. *Interseptum*. The small conical fleshy substance hanging in the middle of the *velum pendulum palati*, over the root of the tongue. It is composed of the common membrane of the mouth, and a small muscle resembling a worm which arises from the union of the palatine bone, and descends to the tip of the uvula. It was called *Palato staphilinus*, by Douglas, and *Staphilinus epistaphilinus*, by Winslow. By its contraction the uvula is raised up.

UVULA'RIA. (From *uvula*, because it cured diseases of the uvula.) See *Ruscus hypoglossum*.

V.

Va'cca. The cow.

Vacca'ria. (From *vacca*, a cow; because it is coveted by cows.) The herb cow's-basil.

VACCINATION. The insertion of the matter to produce the cow-pox. See *Variola vaccina*.

VACCI'NIUM. (*Quasi baccinium*, from its berry.) The name of a genus of plants in the Linnæan system. Class, *Octandria*. Order, *Monogynia*.

Vacci'nium myrti'llus. The systematic name of the myrtle-berry. The berries which are directed in pharmacopœias by the name of *baccæ myrtillorum*, are the fruit of the *Vaccinium myrtillus*, of Linnæus. Prepared with vinegar they are esteemed as antiscorbutics, and when dry possess astringent virtues.

Vacci'nium oxyco'ccos. The systematic name of the cranberry-plant. *Oxycoccos. Vaccinia palustris. Vitis idæa palustris.* Moor-berry. The cranberry. The berries of the *Vaccinium oxycoccos*, of Linnæus, are inserted in some pharmacopœias. They are about the size of our haws, and are pleasantly acid, and cooling, with which intention they are used medicinally in Sweden. In this country they are mostly preserved and made into tarts.

Vacci'nium vi'tis idæ'a. The systematic name of the red whortle-berry. *Vitis idæa.* The leaves of this plant, *vaccinium vitis idæa*, of Linnæus, are so adstringent as to be used in some places for tanning. They are said to mitigate the pain attendant on calculous diseases when given internally in the form of decoction. The ripe berries abound with a grateful acid juice; and are esteemed in Sweden as aperient, antiseptic, and refrigerant, and often given in putrid diseases.

VAGI'NA. *Vagina uteri.* That canal which leads from the pudendum or external orifice to the uterus, is called the vagina. It is somewhat of a conical form, with the narrowest part downwards, and is described as being five or six inches in length, and about two in diameter. But it would be more proper to say, that it is capable of being extended to those dimensions; for in its common state, the os uteri is seldom found to be more than three inches from the external orifice, and the vagina is contracted as well as shortened. The vagina is composed of *two coats*, the first or innermost of which is villous interspersed with many excretory ducts, and contracted into plicæ, or small transverse folds, particularly at the fore and back part, but, by child-bearing these are lessened or obliterated. The second coat is composed of a firm membrane, in which muscular fibres are not distinctly observable, but which are endowed, to a certain degree, with contractile powers like a muscle. This is surrounded by cellular membrane, which connects it to the neighbouring parts. A portion of the upper and posterior part of the vagina is also covered by the peritonæum. The entrance of the vagina is constricted by muscular fibres originating from the rami of the pubis, which run on each side of the pudendum, surrounding the posterior part, and executing an equivalent office, though they cannot be said to form a true sphincter.

The upper part of the vagina is connected to the circumference of the os uteri, but not in a straight line, so as to render the cavity of the uterus a continuation of that of the vagina. For the latter stretches beyond the former, and, being joined to the cervix, is reflected over the os uteri, which by this mode of union, is suspended with protuberant lips in the vagina, and permitted to change its position in various ways and directions. When, therefore, these parts are distended and unfolded at the time of labour, they are continued into each other, and there is no part which can properly be considered as the precise beginning of the uterus or termination of the vagina.

The diseases of the vagina are, first, such an abbreviation and contraction as render it unfit for the uses for which it was designed: secondly, a cohesion of the sides in consequence of preceding ulceration: thirdly, cicatrices after an ulceration of the parts: fourthly, excrescences; fifthly, fluor albus. This abbreviation and contraction of the vagina, which usually accompany each other, are produced by original defective formation, and they are seldom discovered before the time of marriage, the consummation of which they sometimes prevent. The curative intentions are to relax the parts by the use of emollient applications, and to dilate them to their proper size by sponge, or other tents, or, which are more effectual, by bougies gradually enlarged. But the circumstances which attend this disorder, are sometimes such as might lead us to form an erroneous opinion of the disease. A case of this kind, which was under Dr. Denman's care, from the strangury, from the heat of the parts, and the profuse and inflammatory discharge, was suspected to proceed from venereal infection; and with that opinion the patient had been put upon a course of medicine composed of quicksilver, for several weeks, without relief. When she applied to the Dr. he prevailed upon her to submit to an examination, and found the vagina rigid, so much contracted as not to exceed half an inch in diameter, nor more than one inch and a half in length. The repeated, though fruitless attempts which had been made to complete the act of coition, had occasioned a considerable inflammation upon the parts, and all the suspicious appearances beforementioned. To remove the inflammation she was bled, took some gentle purgative medicines, used an emollient fomentation, and afterwards some unctuous applications; she was also advised to live separate from her husband for some time. The inflammation being gone, tents of various sizes were introduced into the vagina, by which it was distended, though not very amply. She then returned to her husband, and in a few months became pregnant. Her labour, though slow, was not attended with any extraordinary difficulty. She was delivered of a full-sized child, and afterwards suffered no inconvenience. Another kind of constriction of the external parts sometimes occurs, and which seems to be a mere spasm. By the violence or long continuance of a labour, by the morbid state of the constitution, or by the negligent and improper use of instruments, an inflammation of the external parts, or vagina, is sometimes produced in such a degree as to endanger a mortification. By careful management this consequence is usually prevented, but in some cases, when the constitution of the patient was prone to disease, the external parts have sloughed away, and in others, equal injury has been done to the vagina. But the effect of the inflammation is usually confined to the internal or villous coat, which is sometimes cast off wholly or partially. An ulcerated surface being thus left, when the disposition to heal has taken place, cicatrices have been formed of different kinds, according to the depth and extent of the ulceration, and there being no counteraction to the contractile state of the parts, the dimensions of the vagina become much reduced, or, if the ulceration should not be healed, and the contractibility of the parts continue to operate, the ulcerated surfaces being brought together may cohere, and the canal of the vagina be perfectly closed.

Cicatrices in the vagina very seldom become an impediment to the connection between the sexes; when they do, the same kind of assistance is required as was recommended in the natural contraction or abbreviation of the part; they always give way to the pressure of the head of the child in the time of labour, though in many cases with great difficulty. Sometimes the appearances may mislead the judgment; for the above author was called to a woman in labour, who was thought to have become pregnant, though the hymen remained unbroken; but, on making very particular inquiry, he discovered that this was her second labour, and that the part, which, from its form and situation, was supposed to be the hymen, with a small aperture, was a cicatrice, or unnatural contraction of the entrance into the vagina, consequent to an ulceration of the part after her former labour. Fungous excrescences arising from any part of the vagina or uterus, have been distinguished, though not very properly by the general term polypus. See *Polypus*.

Vagina of nerves. The outer covering of nerves. By some it is said to be a production of the pia mater only, and by others of the dura mater, because it agrees with it in tenacity, colour, and texture.

Vagina of tendons. A loose membranous sheath, formed of cellular membrane, investing the tendons and containing an unctuous juice, which is secreted by the vessels of its internal surface. Ganglions are nothing more than an accumulation of this juice.

Vagina'lis tu'nica te'stis. See *Tunica vaginalis testis*.

Va'gum par. See *Par vagum*.

Valerian, celtic. See *Valeriana celtica*.

Valerian, garden. See *Valeriana major*.

Valerian, great. See *Valeriana major*.

Valerian, lesser. See *Valeriana*.

Valerian, wild. See *Valeriana*.

VALERIA'NA. (From *Valerius*, who first particularly described it.)

1. The name of a genus of plants in the Linnæan system. Class, *Triandria*. Order, *Monogynia*. Valerian.

2. The pharmacopœial name of the wild valerian. See *Valeriana officinalis*.

Valeria'na ce'ltica. The systematic name of the celtic nard. *Nardus celtica. Spica Celtica Dioscoridis.* Celtic nard. *Valeriana Celtica*, of Linnæus. The root of this plant, a native of the Alps, has been recommended as a stomachic, carminative, and diuretic. At present it is only used in this country in the theriaca and mithridate, though its sensible qualities promise some considerable medicinal powers. It has a moderately strong smell, and a warm, bitterish, subacrid taste.

Valeria'na ma'jor. *Phu.* The garden valerian. The root of this plant, *valeriana phu*, of Linnæus, is said to be efficacious in removing rheumatism, especially the sciatica, and also inveterate epilepsies.

Valeria'na mi'nor. See *Valeriana*.

Valeria'na officina'lis. The systematic name of the wild valerian. *Valeriana minor.* Officinal valerian. *Valeriana offi-*

cinalis; floribus triandris, foliis omnibus pinnatis, of Linnæus. The root of this plant has been long extolled as an efficacious remedy in epilepsy, which caused it to be exhibited in a variety of other complaints termed nervous, in which it has been found highly serviceable. It is also in very general use as an antispasmodic, and is exhibited in convulsive hysterical diseases. A simple and volatile tincture are directed in the pharmacopœias.

Valeria'na phu. The systematic name of the garden valerian. See *Valeriana major*.

Valeria'na sylve'stris. See *Valeriana*.

Va'llum. (From *vallus*, a hedge stake; so called from the regular trench-like disposition of the hairs.) The eye-brows.

VALSALVA, Anton. Maria, was born at Imola in 1666, and placed at a proper age under Malpighi at Bologna, where he applied so closely, as to impair his health. He took his degree at the age of twenty-one, and connecting surgery with physic acquired high reputation. He simplified the instruments in use, banished the practice of cauterizing the arteries after amputation, and employed manual operations in the cure of deafness. In 1697 he was chosen professor of anatomy in the university, and under his direction the school acquired great celebrity: among other distinguished pupils of his, Morgagni must be reckoned, whose chief work, "De Sedibus et Causis Morborum," contains many dissections by Valsalva. As he advanced in life he became corpulent and lethargic, and in 1723 was carried off by an apoplectic stroke. His museum was bequeathed to the Institute of Bologna, and his surgical instruments to the Hospital for Incurables. The principal of his works is a treatise "De Aure Humana;" and after his death, three of his dissertations on Anatomical Subjects were printed by Morgagni.

VALVE. (*Valva*; from *valveo*, to fold up.) A thin and transparent membrane situated within certain vessels, as arteries, veins, and absorbents, whose office appears to be to prevent the contents of the vessel from flowing back.

Valve of the colon. The end of the iliac portion of the small intestine enters the large one obliquely, and projects somewhat within it, so as to form a kind of valve, called from its discoverer the valve of Tulpius, also the valve of the cæcum.

Valves, semilunar. See *Semilunar valves.*

Valves, tricuspid. See *Tricuspid valves.*

Valves, triglochin. See *Tricuspid valves.*

VA'LVULA. (Dim. of *valva*.) A little valve.

Va'lvula co'li. See *Intestines*.

Va'lvula Eusta'chii. A membranous semilunar valve, which separates the right auricle from the inferior vena cava, first described by Eustachius.

Va'lvula tu'lpii. See *Valve of the colon.*

VA'LVULÆ CONNIVE'NTES. The semilunar folds formed of the villous coat of the intestinum duodenum, and jejunum. Their use appears to be to increase the internal surface of the intestines.

VA'LVULÆ MITRA'LES. See *Mitral valves.*

VA'LVULÆ SEMILUNA'RES. See *Semilunar valves.*

VA'LVULÆ TRIGLOCHI'NES. See *Tricuspid valves.*

Vanelloe.
Vanilla. } See *Epidendrum vanilla.*

Vapora'rium. (From *vapor*, vapour.) A vapour-bath.

Va'ri. See *Ionthus.*

Va'ria. (From *varius*, changeable.) The small-pox; also small red pimples in the face.

VARICE'LLA. (Dim. of *varia*, the small-pox; so called from its being changeable.) *Variola lymphatica.* The chicken-pox. A genus of disease in the Class, *Pyrexiæ*, and Order, *Exanthemata*, of Cullen; known by moderate synocha; pimples bearing some resemblance to the small-pox, quickly forming pustules, which contain a fluid matter, but scarcely purulent, and after three or four days from their first appearance, desquamate.

VARICOCE'LE. (From *varix*, a distended vein, and κηλη, a tumour.) A swelling of the veins of the scrotum, or spermatic cord; hence it is divided into the *scrotal varicocele*, which is known by the appearance of livid and tumid veins on the scrotum; and *varicocele of the spermatic cord*, known by feeling hard vermiform vessels in the course of the spermatic cord. Varicocele mostly arises from excessive walking, running, jumping, wearing of trusses, and the like, producing at first a slight uneasiness in the part, which, if not remedied, continues advancing towards the loins.

VARI'OLA. (From *varius*, changing colour, because it disfigures the skin.) The small-pox. A genus of disease in the Class, *Pyrexiæ*, and Order, *Exanthemata*, of Cullen; distinguished by synocha; eruption of red pimples on the third day, which on the eighth day contain pus, and afterwards drying, fall off in crusts.

It is a disease of a very contagious nature, supposed to have been introduced into Europe from Arabia, and in which there arises a fever, that is succeeded by a number of little inflammations in the skin, which proceed to suppuration, the matter formed thereby being capable of producing the disorder in another person. It makes its attack on people of all ages, but the young of both sexes are more liable to it than those who are much advanced in life; and it may prevail at all seasons of the year, but in general is most prevalent in the spring and summer.

The small-pox is distinguished into the distinct and confluent, implying that in the former, the eruptions are perfectly separate from each other, and that in the latter, they run much into one another.

Both species are produced either by breathing air impregnated with the effluvia arising from the bodies of those who labour under the disease, or by the introduction of a small quantity of the variolous matter into the habit by inoculation; and it is probable that the difference of the small-pox is not owing to any difference in the contagion, but depends on the state of the person to whom it is applied, or on certain circumstances concurring with the application of it.

A variety of opinions have been entertained respecting the effect of the variolous infection on the fœtus in utero; a sufficient number of instances, however, has been recorded, to ascertain that the disease may be communicated from the mother to the child. In some cases, the body of the child, at its birth has been covered with pustules, and the nature of the disease has been most satisfactorily ascertained by inoculating with matter taken from the pustules. In other cases, there has been no appearance of the disease at the time of the birth, but an eruption and other symptoms of the disease have appeared so early, as to ascertain that the infection must have been received previously to the removal of the child from the uterus.

Four different states, or stages, are to be observed in the small-pox: first, the febrile; second, the eruptive; third, the maturative; and fourth, that of the declination or scabbing. When the disease has arisen naturally, and is of the distinct kind, the eruption is commonly preceded by a redness in the eyes, soreness in the throat, pains in the head, back, and loins, weariness and faintness, alternate fits of chilliness and heat, thirst, nausea, inclination to vomit, and a quick pulse.

In some instances these symptoms prevail in a high degree, and in others they are very moderate and trifling. In very young children, startings and convulsions are apt to take place a short time previous to the appearance of the eruption, always giving great alarm to those not conversant with the frequency of the occurrence.

About the third or fourth day from the first seizure, the eruption shows itself in little red spots on the face, neck, and breast, and these continue to increase in number and size for three or four longer, at the end of which time, they are to be observed dispersed over several parts of the body.

If the pustules are not very numerous, the febrile symptoms will generally go off on the appearance of the eruption, or they will become very moderate. It sometimes happens, that a number of little spots of an erysipelatous nature are interspersed amongst the pustules; but these generally go in again, as soon as the suppuration commences, which is usually about the fifth or sixth day, at which period, a small vesicle, containing an almost colourless fluid, may be observed upon the top of each pimple. Should the pustules be perfectly distinct and separate from each other, the suppuration will probably be completed about the eighth or ninth day, and they will then be filled with a thick yellow matter; but should they run much into each other, it will not be completed till some days later.

When the pustules are very thick and numerous on the face, it is apt about this time to become much swelled, and the eyelids to be closed up, previous to which, there usually arises a hoarseness, and difficulty of swallowing, accompanied with a considerable discharge of viscid saliva. About the eleventh day, the swelling of the face usually subsides, together with the affection of the fauces, and is succeeded by the same in the hands and feet, after which the pustules break, and discharge their contents; and then becoming dry, they fall in crusts, leaving the skin which they covered of a brown-red colour, which appearance continues for many days. In those cases where the pustules are large, and are late in becoming dry and falling off, they are very apt to leave pits behind them; but where they are small, suppurate quickly, and are few in number, they neither leave any marks behind them, nor do they occasion much affection of the system.

In the confluent small-pox, the fever which precedes the eruption is much more violent than in the distinct, being attended usually with great anxiety, heat, thirst, nausea, vomiting, and a frequent and contracted pulse, and often with coma or delirium. In infants, convulsive fits are apt to occur, which either prove fatal before any eruption appears, or they usher in a malignant species of the disease.

The eruption usually makes it appearance about the third day, being frequently preceded or attended with a rosy efflorescence, similar to what takes place in the measles; but the fever, although it suffers some slight remission on the coming out of the eruption, does not go off as in the distinct kind; on the contrary, it becomes increased after the fifth or sixth day, and continues considerable throughout the remainder of the disease.

As the eruption advances, the face being thickly beset with pustules, becomes very much swelled, the eyelids are closed up, so as to deprive the patient of sight, and a gentle salivation ensues, which, towards the eleventh day, is so viscid as to be spit up with great difficulty. In children, a diarrhœa usually attends this stage of the disease instead of a salivation, which is to be met with only in adults. The vesicles on the top of the pimples are to be perceived sooner in the confluent small-pox than in the distinct; but they never rise to an eminence, being usually flatted in; neither do they arrive to proper suppuration, as the fluid contained in them, instead of becoming yellow, turns to a brown colour.

About the tenth or eleventh day, the swelling of the face usually subsides, and then the hands and feet begin to puff up and swell, and about the same time the vesicles break, and pour out a liquor that forms into brown or black crusts, which, upon falling off, leave deep pits behind them that continue for life; and where the pustules have run much into each other, they then disfigure and scar the face very considerably.

Sometimes it happens that a putrescency of the fluids takes place at an early period of the disease, and shows itself in livid spots interspersed amongst the pustules, and by a discharge of blood by urine, stool, and from various parts of the body.

In the confluent small-pox, the fever, which, perhaps, had suffered some slight remission from the time the eruption made its appearance to that of maturation, is often renewed with considerable violence at this last-mentioned period, which is what is called the secondary fever, and this is the most dangerous stage of the disease. It has been observed, even amongst the vulgar, that the small-pox is apt to appear immediately before or after the prevalence of the measles. Another curious observation has been made relating to the symptoms of these complaints, namely, that if, while a patient labours under the small-pox, he is seized with the measles, the course of the former is retarded till the eruption of the measles is finished. The measles appear, for instance, on the second day of the eruption of small-pox, the progress of this ceases, till the measles terminate by desquamation, and then it goes on in the usual way. Several cases are, however, recorded in the Medical and Physical Journal, as likewise in the third volume of the Medical Commentaries, in which a concurrence of the small-pox and measles took place without the progress of the former being retarded. The distinct small-pox is not attended with danger, except when it attacks pregnant women, or approaches nearly in its nature to that of the confluent; but this last is always accompanied with considerable risk, the degree of which is ever in proportion to the violence and permanence of the fever, the number of pustules on the face, and the disposition to putrescency which prevails.

When there is a great tendency this way, the disease usually proves fatal between the eighth and eleventh day, but, in some cases, death is protracted till the fourteenth or sixteenth. The confluent small-pox, although it may not prove immediately mortal, is very apt to induce various morbid affections.

Both kinds of small-pox leave behind them a predisposition to inflammatory complaints, particularly to ophthalmia and visceral inflammations, but more especially of the thorax; and they not unfrequently excite scrophula into action which might otherwise have laid dormant in the system.

The regular swelling of the hands and feet upon that of the face subsiding, and its continuance for the due time, may be regarded in a favourable light.

The dissections which have been made of confluent small-pox, have never discovered any pustules internally on the viscera. From them it also appears that variolous pustules never attack the cavities of the body, except those to which the air has free access, as the nose, mouth, trachea, the larger branches of the bronchia, and the outermost part of the meatus auditorius. In cases of prolapsus ani, they likewise frequently attack that part of the gut which is exposed to the air. They have usually shown the same morbid appearances inwardly, as are met with in putrid fever, where the disease has been of the malignant kind. Where the febrile symptoms have run high, and the head has been much affected with coma or delirium, the vessels of the brain appear, on removing the cranium and dura-mater, more turgid, and filled with a darker coloured blood than usual, and a greater quantity of serous fluid is found, particularly towards the base of the brain. Under similar circumstances, the lungs have often a darker appearance, and their moisture is more copious than usual. When no inflammatory affection has supervened, they are most usually sound.

The treatment of small-pox will differ materially according to the species of the disease. In the distinct, ushered in by synochal pyrexia, it may be occasionally proper in persons of a middle age, good constitution, and plethoric habit, to begin by taking away a moderate quantity of blood; the exhibition of an emetic will be generally advisable, provided there be no material tenderness of the stomach; the bowels must then be cleared, antimonial and other diaphoretics employed, and the antiphlogistic regimen strictly enforced. It is particularly useful in this disease during the eruptive fever to expose the patient freely to cold air, as taught by the celebrated Sydenham; and even the cold affusion may be proper, where there is much heat and redness of the skin, unless the lungs be weak. After the eruption has come out, the symptoms are usually so much mitigated, that little medical interference is necessary. But the confluent small-pox requires more management; after evacuating the primæ viæ, and employing other means to moderate the fever in the beginning, the several remedies adapted to support the strength and counteract the septic tendency, must be resorted to, as the disease advances, such as have been enumerated under typhus. The chief points of difference are, that bark may be more freely given to promote the process of suppuration, and opium to relieve the irritation in the skin; when the eruption has come out, it will be generally proper to direct a full dose of this remedy every night to procure rest, using proper precautions to obviate its confining the bowels, or determining to the head. Where alarming convulsions occur also, opium is the medicine chiefly to be relied upon, taking care subsequently to remove any source of irritation from the primæ viæ. Sometimes the tepid bath may be useful under these circumstances, and favour the appearance of the eruption, where the skin is pale and cold, the pulse weak, &c. Where at a more advanced period the pustules flatten, and alarming symptoms follow, the most powerful cordial and antispasmodic remedies must be tried, as the confectio opii, æther, wine, &c. For the relief of the brain, or other important part, particularly affected, local means may be used, as in typhus. To prevent the eyes being injured, a cooling lotion may be applied, and blisters behind the ears, or even leeches to the temples.

VARI'OLA VACCI'NA. The cow-pox. Any pustulous disease affecting the cow, may be called the cow-pox: whether it arises from an over distension of the udder, in consequence of a neglect in milking the cow, or from the sting of an insect, or any other cause. But the species which claims our particular attention, is that which was recommended to the world by Dr. Jenner, in the year 1798, as a substitute for the small-pox. This, which originates from the grease in the horse's heel, is called the *genuine cow-pox*; all other kinds are *spurious*.

That the vaccine fluid, fraught with such unspeakable benefits to mankind, derives its origin from this humble source, however it may mortify human pride, or medical vanity, is confirmed by the observations and experiments of competent judges. For proofs of this assertion, the reader may consult the works of Dr. Jenner; the Medical and Physical Journal; and a treatise on the subject by Dr. Loy, of which an analysis is given in the Annals of Medicine for the year 1801; and Mr. Ring's work on this disease, which contains the whole mass of evidence that has appeared concerning it.

The genuine cow-pox appears on the teats of the cow, in the form of vesicles, of a blue colour approaching to livid. These vesicles are elevated at the margin, and depressed at the centre. They are surrounded with inflammation. The fluid they contain is limpid. The animals are indisposed; and the secretion of milk is lessened. Solutions of the sulphates of zinc and copper are a speedy remedy for these pustules; otherwise they degenerate into ulcers, which are extremely troublesome. It must, however, be recollected, that much of the obstinacy attending these cases is owing to the friction of the pustules, in consequence of milking. It is probable, that a solution of the superacetate of lead would be preferable to irritating applications.

Similar effects are produced in the hands of the milkers, attended with febrile symptoms, and sometimes with tumours in the axilla. Other parts, where the cuticle is abraded, or which are naturally destitute of that defence, are also liable to the same affection, provided active matter is applied. It even appears that, in some instances, pustules have been produced by the application of vaccine virus to the sound cuticle. One case of this kind may be found in a letter from Dr. Fowler, of Salisbury, to Dr. Pearson, published in the first work of Dr. Pearson on this subject.

The spurious cow-pox is white; and another criterion is, that both in the brute animal and in the human subject, when infected with the casual cow-pox, the sores occasioned by the genuine species are more difficult to heal, than those which are occasioned by the spurious kind. It is of the utmost importance to distinguish the genuine from the spurious sort, which is also, in some degree, infectious; since a want of such discrimination would cause an idea of security against the small-pox, which might prove delusive.

Dr. Jenner has elucidated one point of the first importance, relative to the genuine cow-pox itself. It had frequently been observed, that when this disorder prevailed in a farm, some of the persons who contracted it by milking were rendered insusceptible of the small-pox, while others continued liable to that infection. This is owing to the different periods at which the disease was excited in the human subject; one person, who caught the disease while the virus was in an active state, is rendered secure from variolous contagion; while another who received the infection of the cow-pox when it had undergone a decomposition, is still susceptible of the small-pox. This uncertainty of the prevention, the value of which is beyond all calculation, is probably the reason why it was not before introduced into practice.

From the violent opposition which vaccine inoculation has met with, in consequence of certain apparent failures in the casual way, it may be doubted whether the public would ever have adopted the practice, had not this fallacy been detected by Dr. Jenner. To him also we are indebted for another discovery of the first importance, namely, that the pustule excited in the human subject by vaccine matter, yields a fluid of a similar nature with that which was inserted. This experiment, so essential to the general propagation of the practice, and so happy in its result, was never before attempted. It was reserved to crown the labours of Dr. Jenner.

A considerable number of instances are on record, to prove that farriers and others who receive infection from the heel of a horse, are either partly or totally deprived of the susceptibility of the small-pox. When Dr. Jenner first published an account of his discoveries, this point was enveloped in some degree of obscurity. He then conceived, that the matter of grease was an imperfect preservative against the small-pox. This opinion was founded on the following circumstance: It had been remarked, that farriers either wholly escaped the small-pox, or had that distemper in a milder manner than other people. This, however, is easily reconcileable to reason, if we only suppose, that in some cases the infection is communicated when the virus possesses all its prophylactic virtue; and in others, when its specific quality is in some measure lost.

This variation in the effects produced by the virus of the horse, inclined Dr. Jenner to believe that it was modified, and underwent some peculiar alteration in the teats of the cow. He now concludes, that it is perfect when it excites the genuine disease in the cow; yet a considerable advantage is derived from its being transferred to the latter animal, the nipples of which furnish a more obvious and a more abundant source of this inestimable fluid, than its original element the horse.

This theory, that the preservative against variolous contagion is perfect when it issues from the fountain-head, and comes immediately from the hands of nature, is consonant with reason, and consistent with analogy. Thus one obstacle more to the universal adoption of the practice is removed.

Another point respecting vaccine inoculation, which has been much controverted, is the permanency of its effect. Instances have been known where persons have escaped the small-pox for a number of years, and yet have ultimately proved not insusceptible of its infection. When such persons had previously undergone the vaccine disease, their apparent security was erroneously ascribed to that cause; but we have not even a shadow of proof, that the cow-pox possesses in the least degree the property of a temporary prophylactic, since it appears not even to retard the eruption of the small-pox, where previous infection has been received.

By this remark, it is not meant to be asserted, that it never supersedes or modifies the small-pox, for we have great reason to believe that such beneficial effects often flow from vaccination; but where an eruption of the small-pox actually takes place after vaccine inoculation, the two diseases frequently co-exist, without retarding each other in the smallest degree. It is, therefore, contrary to all reason and analogy, to consider the cow-pox as a mere temporary preservative: it is nothing less than a perfect and permanent security against that terrible disease.

A number of cases are recorded by Dr. Jenner, and other authors, who have written on this subject, in which persons who have received the cow-pox by casual infection, twenty, thirty, forty, and fifty years before, still continued insusceptible of variolous contagion, in whatever form it was applied.

As the cow-pox destroys the susceptibility of the small-pox, so the small-pox destroys that of the cow-pox. To this general rule, however, a few exceptions are said to have occurred. Certain it is, that a pustule has now and then been excited by the insertion of vaccine virus, in those who have had the small-pox, and that this pustule has been known to yield the genuine virus; but it is not equally certain that the pustule has been perfect in all respects. Possibly it may have been defective in point of size or duration; in respect to its areola, or the limpidity of its contents. That such a pustule has, in some instances, yielded effectual virus, is admitted; but this is no more than what has often happened, in cases where persons who have had the small-pox are a second time submitted to that infection in the same form.

The artificial cow-pox in the human subject is much milder than the casual disease; and incomparably milder than the small-pox, even under the form of inoculation. It neither requires medicine nor regimen; it may be practised at any season of the year; and, not being infectious by effluvia, one person may be inoculated without endangering the life of another.

This affection produces no pustulous eruptions. When such attend vaccine inoculation, they are owing to some adventitious cause, such as the small-pox, which it is well known may co-exist with the cow-pox. The vaccine vesicle is confined to the parts where matter is inserted; it is, therefore, entirely a local and an inoculated disease. Nevertheless, it is certain, that eruptions of other kinds, in some instances, attend vaccine inoculation; such as a nettle-rash, or an eruption resemblinga tooth-rash, but rather larger than what is commonly called by that name.

Among other singularities attending the cow-pox, the mildness of the disease, under the form of inoculation, has been urged as an argument against the practice, the cause appearing to ordinary comprehensions, inadequate to the effect. This, it must be allowed, is the best apology that can be offered for scepticism on that point; but it will weigh but little when put into the scale against actual observation, and incontrovertible fact. The efficacy of the cow-pox as a safe-guard against the small-pox, rests, perhaps, on more extensive evidence, and a more solid foundation, than any other axiom in the whole circle of medical science can boast.

That the cow-pox is not infectious by effluvia, is naturally concluded from its never being communicated from one person to another in the dairies; where the disease is casual, and appears under its worst form. The same inference may be drawn from its never spreading in a family, when only one person is inoculated at a time. To confirm this proposition more fully, the vaccine pustules have been ruptured, and persons who have never had the disorder have been suffered to inhale the effluvia several times a day, but to no purpose. This is no more than might be expected, in an affection where the pustulous appearance on the surface of the body is nearly local.

As to the constitutional indisposition, it is seldom considerable, unless there is a complication of this with some other distemper; and whenever any unfavourable symptoms appear, they may in general be traced to some other cause. We have indeed great reason to believe, that no ill consequence ever arises from the cow-pox itself, unless from ignorance or neglect.

But notwithstanding the symptoms are so mild, they frequently occur at a very early period. A drowsiness which is one of the most common attendants of the disease, is often remarked by the parents themselves, within forty-eight hours after the matter is inserted. In a majority of cases, a slight increase of heat is perceptible, together with an acceleration of the pulse, and other signs of pyrexia; but not in such a degree as to alarm the most timorous mother. Sometimes the patient is restless at nights; and now and then a case is met with, in which vomiting occurs, but in many cases, no constitutional indisposition whatever can be perceived. Even then, the cow-pox has never failed to prove an effectual preservative against the small-pox, provided the pustule has been perfect.

This being the grand criterion of the security of the patient, too minute an attention cannot be paid to its rise, progress, and decline. The best mode of inoculating is by making a very small oblique puncture in the arm, near the insertion of the deltoid muscle, with the point of a lancet charged with fluid matter. In order to render nfection more certain, the instrument may be charged again, and wiped upon the puncture.

In places where the patient is likely to be exposed to variolous contagion, it is adviseable to inoculate in more places than one, but unless there is imminent danger of catching the small-pox, it is better not to make more than one puncture in each arm, lest too much inflammation should ensue.

The vaccine fluid may be taken for inoculation as soon as a vesicle appears; but if the vesicle is punctured at a very early period, it is more apt to be injured. When virus is wanting for inoculating a considerable number, it is better to let the pustule remain untouched, till about the eighth day, by which time it has in general acquired a reasonable magnitude. After that day, if the pustule has made the usual progress, the matter begins to lose its virtue; but it may, in general, be used with safety, though with less certainty of producing infection, till the areola begins to be extensive.

The first sign of infection commonly appears on the third day. A small red spot, rather elevated, may be perceived at the place where the puncture was made. Sometimes, however, the mark of infection having succeeded is not visible till a much later period. It may be retarded, or even entirely prevented, by any other disorder, such as dentition, or any complaint attended with fever, or by extreme cold. Another frequent cause of a slow progress in the pustule, or a total failure of success, is debility. Sometimes it is impossible to discover any sign of infection for above a fortnight. In this respect the cow-pox is subject to the same laws, and liable to the same variation, as the small-pox.

When a considerable inflammation appears within two or three days after inoculation, there is reason to suspect that infection has not taken place; and if suppuration ensues, that suspicion ought, in general, to stand confirmed. Now and then, however, it happens, that after the spurious pustule, or more properly speaking, the phlegmon, has run its course, which is within a few days, a vesicle begins to appear, bearing every characteristic of the genuine vaccine disease, and yielding a limpid and efficient virus for future inoculations. In this case the patient is as perfectly secured from all danger of the small-pox, as if no festering of the puncture had preceded. The occurrence of such a case, though rare, is worthy to be recorded; because some practitioners have concluded a spurious pustule to be a certain proof of failure.

The areola commonly begins to be extensive on the ninth day, and to decline about the eleventh or twelfth. At this period also the pustule begins to dry; the first sign of which is a brown spot in the centre. In proportion as this increases the surrounding efflorescence decreases, till at length nothing remains but a circular scab, of a dark-brown mahogany colour, approaching to black. Sometimes it resembles the section of a tamarind stone; and it often retains the depression in the centre, which characterises this disease before exsiccation takes place.

Instances have been known, where the vaccine pustule, though regular, and perfect in all other respects, has been totally destitute of areola; at least, where neither the medical practitioner, on visiting the patient, nor the attendants have remarked any appearance of that symptom. In these cases, the patient has proved as insusceptible of variolous infection, as if the surrounding efflorescence had covered the whole arm. It must, however, be confessed that we have no proof of the non-existence of an areola in these cases. It might have been trivial; it might have been transient; yet it might have been effectual. There is, however, greater reason to believe, that the surrounding efflorescence, though usually a concomitant circumstance, is not an essential requisite to the vaccine disease.

If by any accident the vesicle is ruptured, suppuration often ensues. In this case more attention than ordinary ought to be paid to the progress, and to all the phenomena of the local affection; both on account of the uncertainty of success in the pustule, as a prophylactic; and the greater probability of tedious ulceration.

If there is room for the least doubt of the sufficiency of the first inoculation a second ought to be performed without delay. This, if unnecessary, is seldom attended with inconvenience, and never with danger. Either no effect is produced, or a slight festering, which terminates in a few days. An exception occurs, but rarely, where a spurious, or perhaps, even a genuine pustule, takes place, in those persons who are known to have had the cow-pox or the small-pox already; but this cannot be the least cause of alarm to any one who knows the benign character of the distemper.

Various topical applications, both stimulant and sedative, have been recommended, in order to allay the violence of inflammation. If the operation for the insertion of matter is not unnecessarily severe, nor the pustule irritated by friction, or pressure, or other violence, no such applications are necessary. Nevertheless, if either the anxiety of the professional man, or the importunity of a tender parent, should demand a deviation from this general rule, any of the following remedies may be had recourse to. The pustule may be touched with very diluted sulphuric acid; which should be permitted to remain on the part half a minute, and then be washed off with a sponge dipped in cold water. This has been ignorantly, or artfully, called an escharotic; but any one who tries the application will soon discover, that its operation is mild and harmless.

To avoid cavil and misrepresentation, it is better to apply a saturnine lotion; compresses, dipped in such a lotion, may be applied at any time when inflammation runs high, and renewed as occasion requires.

If the pustule should chance to be broken, a drop of the liq. plumbi subacet. undiluted, may be applied as an exsiccant; but if ulceration threatens to become obstinate, or extensive, a mild cataplasm is the best resource. In case the ulceration is only superficial, and not attended with immoderate inflammation, a bit of any adhesive plaster, spread on linen, will prove the most convenient dressing, and seldom fail of success. It will, in general, be unnecessary to renew it oftener than every other day.

These minute observations no one will despise, unless there be any person so ignorant as not to know that the care of the arm is almost the whole duty of the medical practitioner in vaccine inoculation; and that nothing disgusts the public so much against the practice, as a sore arm, and the ill consequences which, from a neglect of that symptom, too often ensue.

When fluid virus cannot be procured, it is necessary to be cautious how it is preserved in a dry state. The most improper mode is that of keeping it on a lancet; for the metal quickly rusts, and the vaccine matter becomes decomposed. This method, however, is as likely to succeed as any, when the matter is not to be kept above two or three days. If the virus be taken on glass, care must be taken not to dilute it much; otherwise it will in all probability fail.

Cotton thread is a very commodious vehicle. If it is intended to be sent to any considerable distance, it ought to be repeatedly dipped in the virus. No particular caution is necessary with regard to the exclusion of air; nevertheless, as it can be done with so little trouble, and is more satisfactory to those who receive the matter, it is better to comply with the practice. On this account it may be enclosed in a glass tube, or in a tobacco-pipe sealed at each end, or between two square bits of glass, which may, if necessary, be also charged with the matter, and wrapped in gold-beater's skin.

Nothing is more destructive to the efficacy of cow-pock matter than heat: on this account it must not be dried near the fire, nor kept in a warm place. The advantage of inserting it in a fluid state is so great, that it is to be wished every practitioner would endeavour to keep a constant supply for his own use, by inoculating his patients in succession, at such periods as are most likely to answer that purpose.

The rapidity with which this practice now spreads in various parts of the globe, justifies our cherishing a hope, that it will ere long extinguish that most dreadful pestilence, and perpetual bane of human felicity, the small-pox.

VA'RIUS. (From *varus*, unequal, so called from the irregularity of its shape.) The cuboid bone is called os varium, from its irregular shape.

VA'RIX. (From *varus*, i. e. *obtortus*.) A dilatation of a vein. A genus of disease in the Class, *Locales*, and Order, *Tumores*, of Cullen; known by a soft tumour on a vein which does not pulsate. Varicose veins mostly become serpentine, and often form a plexus of knots, especially in the groins and scrotum.

VAROLI, Costanzo, was born at Bologna in 1542, and became a professor of physic and surgery in his native city. At thirty he was invited by Pope Gregory XIII. to settle at Rome as his first physician, and professor in the College of Sapienza. He was advancing in reputation by his anatomical discoveries, as well as in his practice, when a premature death cut him off in 1573. He was particularly distinguished in the Anatomy of the Brain, which he described in his work "De Nervis Opticis, &c.;" and among the parts discovered, or more accurately demonstrated by him, was that formed by the union of the crura cerebri, and cerebelli, which has been since called the Pons Varoli, and which gives origin to several nerves. After his death was published "De Resolutione Corporis Humani," an anatomical compendium, chiefly according to the antients, but with several new observations.

VAS DE'FERENS. (*Vas*, a vessel, and *deferens*, from *defero*, to convey.) A duct which arises from the epididymis, and passes through the inguinal ring in the spermatic cord into the cavity of the pelvis, and terminates in the vesicula seminalis. Its use is to convey the semen secreted in the testicle, and brought to it by the epididymis into the vesicula seminalis.

VA'SA BRE'VIA. The arteries which come from the spleen, and run along the large arch of the stomach to the diaphragm.

VA'SA DEFERE'NTIA. See *Vas deferens*.

VA'SA VORTICO'SA. The contorted vessels of the choroid membrane of the eye.

VA'STUS EXTE'RNUS. (*Vastus*, so called from its size.) A large thick, and fleshy muscle situated on the outer side of the thigh: it arises by a broad thick tendon, from the lower and anterior part of the great trochanter, and upper part of the linea aspera; it likewise adheres by fleshy fibres, to the whole outer edge of that rough line. Its fibres descend obliquely forwards, and after it has run four or five inches downwards, we find it adhering to the anterior surface and outer side of the cruræus, with which it continues to be connected to the lower part of the thigh, where we see it terminating in a broad tendon, which is inserted into the upper part of the patella laterally, and it sends off an aponeurosis that adheres to the head of the tibia, and is continued down the leg.

VA'STUS INTE'RNUS. This muscle, which is less considerable than the vastus externus, is situated at the inner side of the thigh, being separated from the preceding by the rectus.

It arises tendinous and fleshy from between the fore-part of the os femoris, and the root of the lesser trochanter, below the insertion of the psoas magnus, and the iliacus internus; and from all the inner side of the linea aspera. Like the vastus externus it is connected with the cruræus, but it continues longer fleshy than that muscle. A little above the knee we see its outer edge uniting with the inner edge of the rectus, after which it is inserted tendinous into the upper part and inner side of the patella, sending off an aponeurosis which adheres to the upper part of the tibia.

VEIN. (*Vena*, from *venio*, to come, because the blood comes through it.) Veins are long membranous canals, which continually become wider, do not pulsate, and return the blood from the arteries to the heart. All veins originate from the extremities of arteries only, by anastomosis, and terminate in the auricles of the heart; *e. g.* the venæ cavæ in the right, and the pulmonary veins in the left auricle. They are composed, like arteries, of three tunics or coats, which are much more slender than in the arteries, and are supplied internally with semilunar membranes, or folds called valves. Their use is to return the blood to the heart.

The blood is returned from every part of the body, except the lungs, into the right auricle, from three sources;

1. The *vena cava superior*, which brings it from the head, neck, thorax, and superior extremities.

2. The *vena cava inferior*, from the abdomen and inferior extremities.

3. The *coronary vein* receives it from the coronary arteries of the heart.

1. The *vena cava superior*. This vein terminates in the superior part of the right auricle, into which it evacuates the blood, from the *right* and *left subclavian vein*, and the *vena azygos*. The right and left subclavian veins receive the blood from the head and upper extremities, in the

following manner. The veins of the fingers, called *digitals*, receive the blood from the digital arteries, and empty it into,

The *cephalic of the thumb*, which runs on the back of the hand along the thumb, and evacuates itself into the external radial.

The *salvatella*, which runs along the little finger, unites with the former, and empties its blood into the internal and external cubital veins. At the bend of the fore-arm are three veins, called the great cephalic, the basilic, and the median.

The *great cephalic* runs along the superior part of the fore-arm, and receives the blood from the external radial.

The *basilic* ascends on the under side, and receives the blood from the *external* and *internal cubital veins*, and some branches which accompany the brachial artery, called *venæ satellites*.

The *median* is situated in the middle of the fore-arm, and arises from the union of several branches. These three veins all unite above the bend of the arm, and form

The *brachial vein*, which receives all their blood, and is continued into the axilla, where it is called

The *axillary vein*. This receives also the blood from the scapula, and superior and inferior parts of the chest, by the *superior* and *inferior thoracic vein*, the *vena muscularis*, and the *scapularis*.

The axillary vein then passes under the clavicle, where it is called the *subclavian*, which unites with the external and internal jugular veins, and the vertebral vein which brings the blood from the vertebral sinuses; it receives also the blood from the *mediastinal*, *pericardiac*, *diaphragmatic*, *thymic*, *internal mammary*, and *laryngeal* veins, and then unites with its fellow, to form the vena cava superior, or, as it is sometimes called, *vena cava descendens*.

The blood from the external and internal parts of the head and face is returned in the following manner into the external and internal jugulars, which terminate in the subclavians.

The *frontal*, *angular*, *temporal*, *auricular*, *sublingual*, and *occipital* veins receive the blood from the parts after which they are named; these all converge to each side of the neck, and form a trunk, called the *external jugular vein*.

The blood from the brain, cerebellum, medulla oblongata, and membranes of these parts, is received into the lateral sinuses, or veins of the dura mater, one of which empties its blood through the foramen lacerum in basi cranii on each side into the *internal jugular*, which descends in the neck by the carotid arteries, receives the blood from the *thyroideal* and *internal maxillary veins*, and empties itself into the subclavians within the thorax.

The vena azygos receives the blood from the *bronchial*, *superior œsophageal*, *vertebral*, and *intercostal veins*, and empties it into the superior cava.

2. *Vena cava inferior.* The vena cava inferior is the trunk of all the abdominal veins and those of the lower extremities, from which parts the blood is returned in the following manner. The veins of the toes, called the *digital veins*, receive the blood from the digital arteries, and form on the back of the foot three branches, one on the great toe, called the *cephalic*, another which runs along the little toe, called the *vena saphena*, and a third on the back of the foot, *vena dorsalis pedis*; and those on the sole of the foot evacuate themselves into the *plantar veins*.

The three veins on the upper part of the foot coming together above the ankle, form the *anterior tibial*; and the plantar veins with a branch from the calf of the leg, called the *sural vein*, form the *posterior tibial*; a branch also ascends in the direction of the fibula, called the *peroneal vein*. These three branches unite before the ham, into one branch, the *subpopliteal vein*, which ascends through the ham, carrying all the blood from the foot: it then proceeds upon the anterior part of the thigh, where it is termed the *crural* or *femoral vein*, receives several muscular branches, and passes under Poupart's ligament into the cavity of the pelvis, where it is called the *external iliac*.

The arteries which are distributed about the pelvis evacuate their blood into the *external hæmorrhoidal veins*, the *hypogastric veins*, the *internal pudendal*, the *vena magna ipsius penis*, and *obturatory veins*, all of which unite in the pelvis, and form the *internal iliac vein*.

The external iliac vein receives the blood from the external pudendal veins, and then unites with the internal iliac at the last vertebra of the loins; after which it forms with its fellow the *vena cava inferior* or *ascendens*, which ascends on the right side of the spine, receiving the blood from the *sacral*, *lumbar*, *emulgent*, *right spermatic veins*, and the *vena cava hepatica*; and having arrived at the diaphragm, it passes through the right foramen, and enters the right auricle of the heart, into which it evacuates all the blood from the abdominal viscera and lower extremities.

Vena cava hepatica. This vein ramifies in the substance of the liver, and brings the blood into the vena cava inferior from the branches of the *vena portæ*, a great vein which carries the blood from the abdominal viscera into the substance of the liver. The trunk of this vein, about the fissure of the liver in which it is situated, is *divided* into the hepatic and abdominal portions. The *abdominal portion* is composed of the *splenic*, *meseraic*, and *internal hæmorrhoidal veins*. These three venous branches carry all the blood from the stomach, spleen, pancreas, omentum, mesentery, gall-bladder, and the small and large intestines, into the *sinus* of the vena portæ. The *hepatic portion* of the vena portæ enters the substance of the liver, divides into innumerable ramifications, which secrete the bile, and the superfluous blood passes into corresponding branches of the *vena cava hepatica*.

The *action of the veins*. Veins do not pulsate; the blood which they receive from the arteries flows through them very slowly, and is conveyed to the right auricle of the heart, by the contractility of their coats, the pressure of the blood from the arteries, called the *vis a tergo*, the contraction of the muscles, and respiration; and it is prevented from going backwards in the vein by the valves, of which there are a great number.

VEJUCA DU GUACO. A plant which has the power of curing and preventing the bite of venomous serpents.

VELAME′NTUM BOMBY′CINUM. The interior soft membrane of the intestines.

VE′LUM PE′NDULUM PALA′TI. *Velum*. *Velum palatinum*. The soft palate. The soft part of the palate, which forms two arches, affixed laterally to the tongue and pharynx.

VE′NA A′ZYGOS. See *Azygos vein*.

VE′NA MEDINE′NSIS. See *Medinensis vena*.

VE′NA PO′RTÆ. (*Vena portæ*, *a portando*, because through it things are carried.) *Vena portarum*. The great vein, situated at the entrance of the liver, which receives the blood from the abdominal viscera, and carries it into the substance of the liver. It is distinguished into the *hepatic* and *abdominal* portion: the former is ramified through the substance of the liver, and carries the blood destined for the formation of the bile, which is returned by branches to the trunk of the vena cava; the latter is composed of three branches; viz. the splenic, mesenteric, and internal hæmorrhoidal veins. See *Vein*.

VE′NÆ LA′CTEÆ. The lacteal absorbents were so called. See *Lacteals*.

Venereal disease. See *Gonorrhœa* and *Syphilis*.

VE′NTER. A term formerly applied to the larger circumscribed cavities of the body, as the abdomen and thorax.

VENTRICLE. A term given by anatomists to the cavities of the brain and heart. See *Cerebrum* and *Heart*.

VENTRI′CULUS PULMONA′RIS. The right ventricle of the heart.

VENTRI′CULUS SUCCENTURIA′TUS. That portion of the duodenum, which is surrounded by the peritoneum, is sometimes so large as to resemble a second stomach, and is so called by some writers.

VE′NUS. Copper was formerly so called by the chemists.

VERA′TRUM. 1. The name of a genus of plants in the Linnæan system. Class, *Polygamia*. Order, *Monoecia*.

2. The pharmacopœial name of white hellebore. See *Veratrum album*.

VERA′TRUM A′LBUM. *Helleborus albus*. *Elleborum album*. White hellebore, or veratrum. *Veratrum album : racemo supradecomposito, corollis erectis*, of Linnæus. This plant is a native of Italy, Switzerland, Austria, and Russia. Every part of the plant is extremely acrid and poisonous. The dried root has no particular smell, but a durable, nauseous, and bitter taste, burning the mouth and fauces: when powdered, and applied to issues, or ulcers, it produces griping and purging; if snuffed up the nose, it proves a violent sternutatory. Gesner made an infusion of half an ounce of this root with two ounces of water; of this he took two drachms, which produced great heat about the scapulæ and in the face and head, as well as the tongue and throat, followed by singultus, which continued till vomiting was excited. Bergius also experienced very distressing symptoms, upon tasting this infusion. The root, taken in large doses, discovers such acrimony, and operates by the stomach and rectum with such violence, that blood is usually discharged; it likewise acts very powerfully upon the nervous system, producing great anxiety, tremors, vertigo, syncope, aphonia, interrupted respiration, sinking of the pulse, convulsions, spasms, and death. Upon opening those who have died of the effects of this poison, the stomach discovered marks of inflammation, with corrosions of its internal coat. The antients exhibited this active medicine in maniacal cases, and it is said with success. The experience of Greding is somewhat similar: out of twenty-eight cases, in which he exhibited the bark of the root collected in the spring, five were cured. In almost every case that he relates, the medicine acted more or less upon all the excretions; vomiting and purging were very generally produced, and the matter thrown off the stomach was constantly mixed with bile; a florid redness frequently appeared on the face, and various cutaneous efflorescences upon the body; and, in some, pleuritic symptoms, with fever, supervened, so as to require bleeding; nor were the more alarming affections of spasms and convulsions unfrequent. Critical evacuations were also very evident; many sweating profusely, in some the urine was considerably increased, in others the saliva and mucous discharges: and uterine obstructions, of long duration, were often removed by its use. Veratrum has likewise been found useful in epilepsy, and other convulsive complaints: but the diseases in which its efficacy seems least equivocal, are those of the skin, as itch, and different prurient eruptions, herpes, morbus pediculosus, lepra, scrophula, &c.; and in many of these it has been successfully employed both internally and externally. As a powerful stimulant and irritating medicine, its use has been resorted to in desperate cases only, and even then it ought first to be exhibited in very small doses, as a grain, and in a diluted state, and to be gradually increased, according to the effects, which are generally of an alarming nature.

VERA'TRUM NI'GRUM. See *Helleborus niger.*

VERBA'SCUM. (*Quasi barbascum,* from its hairy coat.)

1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.* Mullein.

2. The pharmacopœial name of the yellow and black mullein.

Verba'scum ni'grum. The systematic name of the black mullein. *Candela regia: Tapsus barbatus: Candelaria: Lanaria.* The *Verbascum nigrum,* and *Verbascum thapsus* appear to be ordered indifferently by this name in the pharmacopœias. The flowers, leaves, and roots, are used occasionally as mild adstringents. The leaves possess a roughish taste, and promise to be of service in diarrhœas and other debilitated states of the intestines.

Verba'scum tha'psus. The systematic name of the yellow mullein. See *Verbascum nigrum.*

VERBE'NA. (*Quasi herbena,* a name of distinction for all herbs used in sacred rites.) Vervain.

1. The name of a genus of plants in the Linnæan system. Class, *Decandria.* Order, *Monogynia.*

2. The pharmacopœial name of the vervain. See *Verbena officinalis.*

Verbe'na fœ'mina. The hedge mustard is sometimes so called. See *Erysimum.*

Verbe'na officina'lis. The systematic name of vervain. *Verbenaca. Peristerium. Hierobotane cephalalgia. Herba sacra.* Vervain. This plant is destitute of odour, and to the taste manifests but a slight degree of bitterness and adstringency. In former times the verbena seems to have been held sacred, and was employed in celebrating the sacrificial rites; and with a view to this, more than the natural power of the plant, it was worn suspended about the neck as an amulet.

This practice, thus founded on superstition, was, however, in process of time, adopted in medicine; and, therefore, to obtain its virtues more effectually, the vervain was directed to be bruised before it was appended to the neck; and of its good effects thus used for inveterate head-aches, Forestus relates a remarkable instance. In still later times it has been employed in the way of cataplasm, by which we are told the most severe and obstinate cases of cephalalgia have been cured, for which we have the authorities of Etmuller, Hartman, and more especially De Haën. Notwithstanding these testimonies in favour of vervain, it has deservedly fallen into disuse in Britain; nor has the pamphlet of Mr. Morley, written professedly to recommend its use in scrophulous affections, had the effect of restoring its medical character. This gentleman directs the root of vervain to be tied with a yard of white satin ribbon round the neck, where it is to remain till the patient recovers. He also has recourse to infusions and ointments prepared from the leaves of the plant, and occasionally calls in aid the most active medicines of the Materia Medica.

VERDIGRIS. An impure subacetate of copper. It is prepared by stratifying copper plates with the husks of grapes, after the expression of their juice, and when they have been kept for some time imperfectly exposed to the air, in an apartment warm but not too dry, so as to pass to a state of fermentation, whence a quantity of vinegar is formed. The copper-plates are placed in jars in strata, with the husks thus prepared, which are covered. At the end of twelve, fifteen, or twenty days these are opened: the plates have an efflorescence on their surfaces of a green colour and silky lustre: they are repeatedly moistened with water; and at length a crust of verdigris is formed, which is scraped off by a knife, is put into bags, and dried by exposure of these to the air and sun. It is of a green colour, with a slight tint of blue.

In this preparation the copper is oxydized, probably by the atmospheric air, aided by the affinity of the acetic acid; and a portion of this acid remains in combination with the oxyde, not sufficient, however, to produce its saturation. When acted on by water, the acid, with such a portion of oxyde as it can retain in solution, are dissolved, and the remaining oxyde is left undissolved. From this analysis of it by the action of water, Proust inferred that it consists of 43 of acetate of copper, 27 of black oxyde of copper, and 30 of water, this water not being accidental, but existing in it in intimate combination.

Verdigris is used as a pigment in some of the processes of dyeing, and in surgery it is externally applied as a mild detergent in cleansing foul ulcers, or other open wounds. On account of its virulent properties, it ought not to be used as a medicine without professional advice; and in case any portion of this poison be accidentally swallowed.

emetics should be first given, and afterwards cold water, gently alkalized, ought to be drunk in abundance.

VERHEYEN, Philip, was born in 1648 at Vesbronck, in the country of Waes, and assumed the clerical profession; but an inflammation of his leg having rendered amputation necessary, he was determined afterwards to study medicine. He accordingly graduated and settled at Louvain, where he was nominated professor of anatomy in 1689, and four years after of surgery also. His application was indefatigable, so that he attained distinguished eminence, and attached to his school a great number of disciples. His celebrity was principally the result of a work, entitled, "Anatomia Corporis Humani," which passed through many editions with improvements, and superseded the Compendium of Bartholine. He published also a Compendium of Medicine, a Treatise on Fevers, &c.

Verjuice. An acid liquor prepared from grapes or apples, that are unfit to be converted into wine or cyder. It is also made from crabs. It is principally used in sauces and ragouts, though it sometimes forms an ingredient in medicinal compositions.

Vermicula'ris. See *Sedum acre.*

Vermiform process. *Protuberantia vermiformis.* The substance which unites the two hemispheres of the cerebellum like a ring, forming a process. It is called *vermiform*, from its resemblance to the contortions of worms.

VERMIFUGES. (*Vermifuga*, from *vermis*, a worm, and *fugo*, to drive away.) See *Anthelmintics.*

Vermillion. See *Cinnabar.*

Ve'rmis mo'rdicans. *Vermis repens.* A species of herpetic eruption on the skin.

Ve'rmis terre'stris. See *Earth-worm.*

VERNEY, Guichard-Joseph du, was the son of a physician at Tours, and born in 1648. After studying at Avignon, he removed, at nineteen, to Paris, where he acquired high reputation as an anatomical lecturer. He was admitted, nine years after, into the Academy of Sciences, whose memoirs he enriched by his researches in natural history. In 1679 he was nominated professor of anatomy at the Royal Gardens. His work on the Organ of Hearing appeared about four years after, and was translated into various languages. He continued the pursuit of natural history with great ardour, and even to the detriment of his health, yet he was enabled, by a good constitution, to reach his eighty-second year. He bequeathed his valuable anatomical preparations to the academy. After his death a treatise on the Diseases of the Bones was published from his manuscripts; and subsequently various other papers, under the title of "Œuvres Anatom."

VERO'NICA. 1. The name of a genus of plants in the Linnæan system. Class, *Diandria.* Order, *Monogynia.* Speedwell.

2. The pharmacopœial name of the male veronica. See *Veronica officinalis.*

Vero'nica officina'lis. The systematic name of the plant which is called in the pharmacopœias *Veronica mas. Thea Germanica. Betonica pauli. Chamædrys. Veronica officinalis; spicis lateralibus pedunculatis; foliis oppositis; caule procumbente*, of Linnæus, is not unfrequent on dry barren grounds and heaths, as that of Hampstead, flowering in June and July. This plant was formerly used as a pectoral against coughs and asthmatic affections, but it is now justly forgotten.

Vero'nica beccabu'nga. *Beccabunga. Anagallis aquatica. Laver Germanicum, veronica aquatica. Cepæa.* Water-pimpernel and brooklime. The plant which bears these names, is the *Veronica beccabunga; racemis lateralibus, foliis ovatis planis, caule repente*, of Linnæus. It was formerly considered of much use in several diseases, and was applied externally to wounds and ulcers: but if it have any peculiar efficacy, it is to be derived from its antiscorbutic virtue. As a mild refrigerant juice, it is preferred where an acrimonious state of the fluids prevails, indicated by prurient eruptions upon the skin, or in what has been called the hot scurvy. To derive much advantage from it, the juice ought to be taken in large quantities, or the fresh plant eaten as food.

Verricula'ris tu'nica. The retina of the eye.

VE'RTEBRÆ. (From *verto*, to turn.) The spine is a long bony column, which extends from the head to the lower part of the trunk, and is composed of irregular bones, which are called vertebræ.

The spine may be considered as being composed of two irregular pyramids, which are united to each other in that part of the loins where the last of the lumbar vertebræ is united to the os sacrum.

The vertebræ, which form the upper and longest pyramid are called true vertebræ; and those which compose the lower pyramid, or the os sacrum and coccyx, are termed false vertebæ, because they do not in every thing resemble the others, and particularly because, in the adult state, they become perfectly immoveable, while the upper ones continue to be capable of motion. For it is upon the bones of the spine that the body turns, and their name has its derivation from the Latin verb *verto*, to turn, as observed above.

The true vertebræ, from their situations with respect to the neck, back, and loins, are divided into three classes, of cervical, dorsal, and lumbar vertebræ. We will first consider the general structure of all these, and then separately describe their different classes.

In each of the vertebræ, as in other bones, we may remark the body of the bone, its processes and cavities. The body may be compared to part of a cylinder cut off transversely; convex before, and concave behind, where it makes part of the cavity of the spine.

Each vertebra has commonly seven processes. The first of these is the *spinous* process, which is placed at the back part of the vertebra, and gives the name of spine to the whole of this bony canal. Two others are called *transverse* processes, from their situation with respect to the spine, and are placed on each side of the spinous process. The four others, which are called *oblique* processes, are much smaller than the other three. There are two of these on the upper and two on the lower part of each vertebra, rising from near the basis of the transverse processes. They are sometimes called *articular* processes, because they are articulated with each other; that is, the two superior processes of one vertebra are articulated with the two inferior processes of the vertebra above it; and they are called oblique processes, from their situation with respect to the processes with which they are articulated. These oblique processes are articulated to each other by a species of ginglymus, and each process is covered at its articulation with cartilage.

There is in every vertebra, between its body and apophyses, a foramen, large enough to admit a finger. These foramina correspond with each other through all the vertebræ, and form a long bony conduit, for the lodgment of the spinal marrow.

Besides this great hole, there are four notches on each side of every vertebra, between the oblique processes and the body of the vertebra. Two of these notches are at the upper, and two at the lower part of the bone. Each of the inferior notches, meeting with one of the superior notches of the vertebra below it, forms a foramen; whilst the superior notches do the same with the inferior notches of the vertebra above it. These four foramina form passages for blood-vessels, and for the nerves that pass out of the spine.

The vertebræ are united together by means of a substance, compressible like cork, which forms a kind of partition between the several vertebræ. This intervertebral substance seems, in the fœtus, to approach nearly to the nature of ligaments; in the adult it has a great resemblance to cartilage. When cut horizontally, it appears to consist of concentrical curved fibres, externally it is firmest and hardest; internally it becomes thinner and softer, till at length, in the centre, we find it in the form of a mucous substance, which facilitates the motions of the spine.

Genga, an Italian anatomist, long ago observed, that the change which takes place in these intervertebral cartilages, (as they are usually called) in advanced life, occasions the decrease in stature, and the stooping forwards, which are usually to be observed in old people. The cartilages then become shrivelled, and consequently lose, in a great measure, their elasticity. But, besides this gradual effect of old age, these cartilages are subject to a temporary diminution, from the weight of the body in an erect posture, so that people who have been long standing, or who have carried a considerable weight, are found to be shorter than when they have been long in bed. Hence we are taller in the morning than at night. This fact, though seemingly obvious, was not ascertained till of late years. The difference in such cases depends on the age and size of the subject; in tall, young people, it will be nearly an inch; but in older, or shorter persons, it will be less considerable.

Besides the connection of the several vertebræ, by means of these cartilages, there are likewise many strong ligaments, which unite the bones of the spine to each other. Some of these ligaments are external, and others internal. Among the external ligaments, we observe one which is common to all the vertebræ, extending, in a longitudinal direction, from the fore-part of the body of the second vertebra of the neck, over all the other vertebræ, and becoming broader as it descends towards the os sacrum, where it becomes thinner, and gradually disappears. This external longitudinal ligament, if we may so call it, is strengthened by other shorter ligamentous fibres, which pass from one vertebra to another, throughout the whole spine. The internal ligament, the fibres of which, like the external one, are spread in a longitudinal direction, is extended over the back part of the bodies of the vertebræ, where they help to form the cavity of the spine, and reaches from the foramen magnum of the occipital bone to the os sacrum.

We may venture to remark, that all the vertebræ diminish in density and firmness of texture, in proportion as they increase in size, so that the lower vertebræ, though larger, are not so heavy in proportion as those above them. In consequence of this mode of structure, the size of the vertebræ is increased without adding to their weight; and this is an object of no little importance, in a part of the body, which, besides flexibility and suppleness, seems to require lightness as one of its essential properties.

In the fœtus, at the ordinary time of birth, each vertebra is found to be composed of three bony pieces, connected by cartilages which afterwards ossify. One of these pieces is the body of the bone; the other two are the posterior and lateral portions, which form the foramen for the medulla spinalis. The oblique processes are at that time complete, and the transverse processes beginning to be formed, but the spinous processes are totally wanting.

The cervical vertebræ are seven in number, their bodies are smaller and of a firmer texture than the other bones of the spine. The transverse processes of these vertebræ are short, and forked for the lodgment of muscles; and, at the bottom of each of these processes, there is a foramen, for the passage of the cervical artery and vein. The spinous process of each of these vertebræ is likewise shorter than the other vertebræ, and forked at its extremity; by which means it allows a more convenient insertion to the muscles of the neck. Their oblique processes are more deserving of that name than either those of the dorsal or lumbar vertebræ. The uppermost of these processes are slightly concave, and the lowermost slightly convex. This may suffice for a general description of these vertebræ; but the first, second, and seventh, deserve to be spoken of more particularly. The first, which is called *Atlas,* from its supporting the head, differs from all the other vertebræ of the spine. It forms a kind of bony ring, which may be divided into its anterior and posterior arches, and its lateral portions. Of these, the anterior arch is the smallest and flattest; at the middle of its convex fore-part we observe a small tubercle which is here what the body is in the other vertebræ. To this tubercle a ligament is attached, which helps to strengthen the articulation of the spine with the os occipitis. The back part of this anterior portion is concave, and covered with cartilage, where it receives the odontoid process of the second vertebra. The posterior portion of the vertebra, or, more properly speaking, the posterior arch, is larger than the anterior one. Instead of a spinous process, we observe a rising, or tubercle, larger than that which we have just now described, on the fore-part of the bone. The lateral portions of the vertebra project, so as to form what are called the transverse processes, one on each side, which are longer and larger than the transverse processes of the other vertebræ. They terminate in a roundish tubercle, the end of which has a slight bend downwards. Like the other transverse processes, they are perforated at their basis, for the passage of the cervical artery. But, besides these transverse processes, we observe, both on the superior and inferior surface of these lateral portions of the first vertebra, an articulating surface, covered with cartilage, answering to the oblique processes in the other vertebræ. The uppermost of these are oblong, and slightly concave, and their external edges rise somewhat higher than their internal brims. They receive the condyloid processes of the os occipitis, with which they are articulated by a species of ginglymus. The lowermost articulating surfaces, or the inferior oblique processes, as they are called, are large, concave, and circular, and are formed for receiving the superior oblique processes of the second vertebra; so that the atlas differs from the rest of the cervical vertebræ in receiving the bones, with which it is articulated both above and below. In the fœtus we find this vertebra composed of five, instead of three pieces, as in the other vertebræ. One of these is the anterior arch; the other four are the posterior arch and the sides, each of the latter being composed of two pieces. The transverse process, on each side, remains long in a state of epiphysis with respect to the rest of the bone.

The second vertebra is called *dentata,* from the process on the upper part of its body, which has been, though perhaps improperly, compared to a tooth. This process, which is the most remarkable part of the vertebra, is a of cylindrical shape, slightly flattened, however, behind and before. Anteriorly it has a convex, smooth, articulating surface, where it is received by the atlas, as we observed in our description of that vertebra. It is by means of this articulation that the rotatory motion of the head is performed; the articulation of the os occipitis with the superior oblique processes of the first vertebra, allowing only a certain degree of motion backwards and forwards, so that when we turn the face either to the right or left, the atlas moves upon this odontoid process of the second vertebra. But as the face cannot turn a quarter of a circle, that is, to the shoulder, upon this vertebra alone, without being liable to injure the medulla spinalis, we find that all the cervical vertebræ concur in this rotatory motion, when it is in any considerable degree; and indeed we see many strong ligamentous fibres arising from the sides of the odontoid process, and passing over the first vertebra, to the os occipitis, which not only strengthen the articulation of these bones with each other, but serve to regulate and limit their motion. It is on this account that the name of *moderators* has sometimes been given to these ligaments. The transverse processes of the vertebra *dentata* are short, inclined downwards and forked at their extremities. Its spinous process is short and thick. Its superior oblique processes are slightly convex, and somewhat larger than the articulating surfaces of the first vertebra, by which mechanism, the motion of that bone upon this second vertebra is performed with greater safety. Its inferior oblique processes have nothing singular in their structure.

The seventh vertebra of the neck differs from the rest chiefly in having its spinous process of a greater length, so that, upon this account, it has been sometimes called *vertebra prominens.*

The dorsal vertebræ, which are twelve in number, are of a middle size, between the cervical and lumbar vertebræ; the upper ones gradually losing their resemblance to those of the neck, and the lower ones coming nearer to those of the loins. The bodies of these vertebræ are more flattened at their sides, more convex before, and more concave behind, than the other bones of the spine. Their upper and lower surfaces are horizontal. At their sides we observe two depressions, one at their upper, and the other at their lower edge, which, united with similar depressions in the vertebræ above and below, form articulating surfaces, covered with cartilage, in which the heads of the ribs are received. These depressions, however, are not exactly alike in all the dorsal vertebræ; for we find the head of the first rib articulated solely with the first of these vertebræ, which has therefore the whole of the superior articulating surface within itself, independent of the vertebra above it. We may likewise observe a similarity in this respect in the eleventh and twelfth of the dorsal vetebræ, with which the eleventh and twelfth ribs are articulated separately. Their spinous processes are long, flattened at the sides, divided at their upper and back part into two surfaces by a middle ridge, which is received by a small groove in the inner part of the spinous process immediately above it, and connected to it by a ligament. These spinous processes are terminated by a kind of round tubercle, which slopes considerably downwards, except in the three lowermost vertebræ, where they are shorter and more erect. Their transverse processes are of considerable length and thickness, and are turned obliquely backwards. Anteriorly they have an articulating surface, for receiving the tuberosity of the ribs, except in the eleventh and twelfth of the dorsal vertebræ to which the ribs are articulated by their heads only. In the last of these vertebræ the transvere processes are very short and thick, because otherwise they would be apt to strike against the lowermost ribs, when we bend the body to either side.

The lumbar vertebræ, the lowest of the true vertebræ, are five in number. They are larger than the dorsal vertebræ. Their bodies are extremely prominent, and nearly of a circular form at their fore-part; posteriorly they are concave. Their intermediate cartilages are of considerable thickness, especially anteriorly, by which means the curvature of the spine forwards, towards the abdomen, in this part, is greatly assisted. Their spinous processes are short and thick, of considerable breadth, erect, and terminated by a kind of tuberosity. Their oblique processes are of considerable thickness; the superior ones are concave, and turned inwards; the inferior ones convex, and turned outwards. Their transverse processes are thin and long, except in the first and last vertebra, where they are much shorter, that the lateral motions of the trunk might not be impeded. The inferior surface of all these vertebræ is slightly oblique, so that the fore-part of the body of each is somewhat thicker than its hind-part; but this is more particularly observable in the lowermost vertebra, which is connected with the os sacrum. Many anatomists describe the os sacrum and the os coccygis when considering the bones of the spine, whilst others regard them as belonging more properly to the pelvis. These bones the reader may consult. It now remains to notice the uses of the spine. We find the spinal marrow lodged in this bony canal, secure from external injury. It defends the thoracic and abdominal viscera, and forms a pillar which supports the head, and gives a general firmness to the whole trunk.

To give it a firm basis, we find the bodies of the vertebræ gradually increasing in breadth as they descend; and to fit it for a variety of motion, it is composed of a great number of joints, with an intermediate elastic substance, so that to great firmness there is added a perfect flexibility.

We have already observed, that the lowermost and largest vertebræ are not so heavy in proportion as those above them; their bodies being more spongy, excepting at their circumference, where they are more immediately exposed to pressure; so that nature seems every where endeavouring to relieve us of an unnecessary weight of bone. But behind, where the spinal marrow is more exposed to injury, we find the processes composed of very hard bone; and the spinous processes are in general placed over each other in a slanting direction, so that a pointed instrument cannot easily get between them, excepting in the neck, where they are almost perpendicular and leave a greater space between them. Hence, in some countries, it is usual to kill cattle by thrusting a pointed instrument between the occiput and the atlas, or between the atlas and the second vertebra. Besides these uses of the vertebræ in defending the spinal marrow, and in articulating the several vertebræ, as is the case with the oblique processes, we shall find that they all serve to form a greater surface for the lodgment of muscles, and to enable the latter to act more powerfully on the trunk, by affording them a lever of considerable length.

In the neck, we see the spine projecting somewhat forwards, to support the head, which without this assistance, would require a greater number of muscles. Through the whole length of the thorax it is carried in a curved direction backwards, and thus adds considerably to the cavity of the chest, and consequently affords more room to the lungs, heart, and large blood-vessels. In the loins, the spine again projects forwards, in a direction with the centre of gravity, by which means the body is easily kept in an erect posture; for otherwise we should be liable to fall forwards. But, at its inferior part, it again recedes backwards, and helps to form a cavity called the pelvis, in which the urinary bladder, intestinum rectum, and other viscera, are placed.

In a part of the body that is composed of so great a number of bones, and constructed for such a variety of motion, as the spine is, luxation is more to be expected than fracture; and this is very wisely guarded against in every direction, by the many processes that are to be found in each vertebra, and by the cartilages, ligaments, and other means of connection, which we have described as uniting them together.

Vertebral artery. *Arteria vertebralis.* A branch of the subclavian, proceeding through the vertebræ to within the cranium, where, with its fellow, it forms the basilary artery, the internal auditory, and the posterior artery of the dura mater.

VE'RTEX. The crown of the head.

Vertica'lia o'ssa. See *Parietal bones.*

Ve'rticis os. See *Parietal bones.*

VERTI'GO. Giddiness.

Vervain. See *Verbena.*

Vervain, female. See *Erysimum.*

VESA'LIUS, Andrew, was born at Brussels about the year 1514. After pursuing his studies at different universities, and serving for two years professionally with the Imperial army, he settled at Padua, and taught anatomy with great applause; which he subsequently continued at some other schools in Italy. In 1544 he became physician to Charles V., and resided chiefly at the Imperial Court. About twenty years after, in the midst of his professional career, an extraordinary circumstance occurred, which was the cause of his ruin. Being summoned to examine the body of a Spanish gentleman, and having begun the operation too precipitately, the heart was observed to palpitate; in consequence of which he was accused before the Inquisition: but the interposition of Philip II. procured him to be merely enjoined to make a pilgrimage to the Holy Land. While at Jerusalem he was invited to the anatomical chair at Padua, but on his return the ship was wrecked on the coast of Zante, where he soon after died. Vesalius has been represented as the first person, who rescued anatomy from the slavery imposed upon it by deference to antient opinions, and led the way to modern improvements. His first publication of note was a set of Anatomical Tables, which was soon followed by his great work "De Corporis Humani Fabrica," printed at Basil in 1543, and often since in several countries. The earliest impressions of the plates are most valued, but the explanations were made subsequently more correct. In a treatise "De Radicis Chinæ Usu," he severely criticised the errors of Galen, which engaged him in a controversy with Fallopius. His medical and surgical writings are not held in much estimation.

VESA'NIÆ. (From *Vesanus*, a mad man.) The fourth order in the Class, *Neuroses*, of Cullen's nosological arrangement; comprehending diseases in which the judgment is impaired, without either coma or pyrexia.

VESI'CA. (Dim. of *vas*, a vessel.) A bladder.

VESI'CA FE'LLIS. The gall-bladder. See *Gall-bladder.*

VESI'CA URINA'RIA. The urinary bladder. See *Urinary-bladder.*

VESICATORIES. (*Vesicatoria*, from *vesica*, a bladder; because they raise a bladder.) See *Epispastics.*

VESICLE. (*Vesicula*, a diminutive of *vesica*, a bladder.) An elevation of the cuticle, containing a transparent watery fluid.

Vesi'cula fe'llis. The gall-bladder.

Vesi'culæ di'væ ba'rbaræ. The confluent small-pox.

Vesi'culæ gingiva'rum. The thrush.

VESI'CULÆ PULMONA'LES. The air cells which compose the greatest part of the lungs, and are situated at the termination of the bronchia.

VESI'CULÆ SEMINA'LES. Two membranous receptacles, situated on the back part of the bladder above its neck. The excretory ducts are called ejaculatory ducts. They proceed to the urethra, into which they open by a peculiar orifice at the top of the verumontanum. They have vessels and nerves from the neighbouring parts, and are well supplied with absorbent vessels, which proceed to the lymphatic glands about the loins. The use of the vesiculæ seminales is to receive the semen brought into them by the vasa deferentia, to retain, somewhat inspissate, and to excern it *sub coïtu* into the urethra, from whence it is propelled into the vagina uteri.

Vesicular fever. See *Pemphigus.*

VESTI'BULUM. A round cavity of the internal ear, between the cochlea and semicircular canals, in which are an oval opening communicating with the cavity of the tympanum and the orifices of the semicircular canals. It is within this cavity and the semicircular canals, that the new apparatus, discovered by the celebrated neurologist Scarpa, lies. He has demonstrated membranous tubes, connected loosely by cellular texture, within the bony semicircular canals, each of which is dilated in the cavity of the vestibule into an ampulla; it is upon these ampullæ, which communicate by means of an *alveus communis*, that branches of the portio mollis are expanded.

Veto'nica co'rdi. See *Betonica.*

VI'BEX. (*Vibex*, sing., plu. *Vibices.*)

The large purple spots which appear under the skin in certain malignant fevers.

VIBRI'SSÆ. (*Vibrissa*; from *vibro*, to quaver.) Hairs growing in the nostrils. See *Capillus*.

VICHY WATER. Is obtained from the tepid mineral springs that arise in the vicinity of Vichy, in France. On account of its chalybeate and alkaline ingredients, it is taken internally, being reputed to be of great service in bilious colics, diarrhœas, and in disorders of the stomach, especially such as arise from a relaxed or debilitated state of that organ.

These waters are likewise very useful when employed as a tepid bath, particularly in rheumatism, sciatica, gout, &c. by combining the internal use with the external application, they have often effected a cure where other remedies had failed to afford relief.

VI'CIA FA'BA. The systematic name of the common bean plant. It is a native of Egypt. There are many varieties. Beans are very wholesome and nutritious to those whose stomachs are strong, and accustomed to the coarser modes of living. In delicate stomachs they produce flatulency, dyspepsia, cardialgia, &c. especially when old. See *Legumina*.

VICTORIA'LIS LO'NGA. See *Allium victorialis*.

VIEUSSENS, RAYMOND, was born at a village in Rovergne, graduated at Montpellier, and in 1671 was chosen physician to the Hospital of St. Eloy. The result of his anatomical researches in this situation was published under the title of Neurology, and gained him great reputation. His name became known at Court, and Mad. de Montpensier made him her physician. After her death he returned to Montpellier, and directed his attention to chemistry; and having found an acid in the caput mortuum of the blood, he made this the ground-work of a new medical theory. In advanced life his writings were multiplied without augmenting his reputation. He died in 1726.

VIGILANCE. *Pervigilium*. Vigilance, when attended by anxiety, pain in the head, loss of appetite, and diminution of strength, is by Sauvages and Sagar, considered as a genus of disease, and is called *agrypnia*.

VERRU'CA. A wart.

VERRUCA'RIA. (From *Verruca*, a wart; because it was supposed to destroy warts.) The herb turnsole.

VI'NCA. (From *vincio*, to bind; because of its usefulness in making bands.) The name of a genus of plants in the Linnæan system. Class, *Pentandria*. Order, *Monogynia*. The herb periwinkle, or pervincle.

VI'NCA MI'NOR. The systematic name of the lesser periwinkle. *Vinca pervinca*. *Clematis daphnoides major*. It possesses bitter and adstringent virtues, and is said to be efficacious in stopping nasal hæmorrhages when bruised and put into the nose. Boiled it forms a useful adstringent gargle in common sore throat, and it is given by some in phthisical complaints.

VI'NCA PERVI'NCA. See *Vinca minor*.

VINCETO'XICUM. (From *vinco*, to overcome, and *toxicum*, poison; so named from its supposed virtues of resisting and expelling poisons.) See *Asclepias*.

Vine. See *Vitis*.

Vine, white. See *Bryonia alba*.

Vine, wild. See *Bryonia alba*.

Vinegar. See *Acetum*.

Vinegar, distilled. See *Acetum*.

Vinegar, spirits of. See *Acetum*.

VI'NUM. See *Wine*.

VI'NUM A'LOES. Wine of aloes. Formerly known by the names of *tinctura hieræ*, and *tinctura sacra*. "Take of extract of spiked aloe, eight ounces; canella bark, two ounces; wine, six pints; proof spirits, two pints. Rub the aloes into powder with white sand, previously cleansed from any impurities: rub the canella-bark also into powder; and after having mixed these powders together, pour on the wine and spirit. Macerate for fourteen days, occasionally shaking the mixture, and afterwards strain." A stomachic purgative, calculated for the aged and phlegmatic, who are not troubled with the piles. The dose is from half to a whole fluid ounce.

VI'NUM ANTIMO'NII. In small doses this proves alterative and diaphoretic, and a large dose emetic; in which last intention it is the common emetic for children.

VI'NUM ANTIMO'NII TARTARIZA'TI. See *Antimonium tartarizatum*.

VI'NUM FE'RRI. Wine of iron, formerly called *vinum chalybeatum*. "Take of iron filings, two ounces; wine, two pints. Mix and set the mixture by for a month, occasionally shaking it; then filter it through paper." For its virtues, see *Ferrum tartarizatum*.

VI'NUM IPECACUA'NHÆ. Wine of ipecacuanha. "Take of ipecacuanha-root, bruised two ounces; wine, two pints. Macerate for fourteen days, and strain." The dose, when used as an emetic, is from two fluid drachms to half a fluid ounce.

VI'NUM O'PII. Wine of opium, formerly known by the names of *laudanum liquidum Sydenhami*, and *tinctura thebaica*. "Take of extract of opium, an ounce; cinnamon-bark, bruised, cloves, bruised, of each a drachm; wine, a pint. Macerate for eight days, and strain." See *Opium*.

VI'NUM VERA'TRI. Wine of white hellebore. "Take of white hellebore-root, sliced, eight ounces; wine, two pints and a half; macerate for fourteen days, and strain." See *Veratrum*.

VI'OLA. (From Ιον; because it was first found in Ionia.)

1. The name of a genus of plants in

the Linnæan system. Class, *Syngenesia*. Order, *Monogynia*. The violet.

2. The pharmacopœial name of the Sweet violet. See *Viola odorata*.

Vi'ola cani'na. The dog violet. The root of this plant, *Viola canina*, of Linnæus, possesses the power of vomiting and purging the bowels; with which intention a scruple of the dried root must be exhibited. It appears, though neglected in this country, worthy of the attention of physicians.

Vi'ola ipecacua'nha. The plant which was supposed to afford the ipecacuanha-root.

Vi'ola lu'tea. The wall-flower was so called. See *Cheiranthus cheiri*.

Vi'ola odora'ta. The systematic name of the sweet violet. *Viola acaulis, foliis cordatis, stolonibus repentibus*, of Linnæus. The recent flowers of this plant are received into the catalogues of the Materia Medica. They have an agreeable sweet smell, and a mucilaginous bitterish taste. Their virtues are purgative or laxative, and by some they are said to possess an anodyne and pectoral quality. The officinal preparation of this flower is a syrup, which, to young children, answers the purpose of a purgative; it is also of considerable utility in many chemical enquiries, to detect an acid or an alkali; the former changing the blue colour to a red, and the latter to a green.

Vi'ola palu'stris. See *Pinguicula*.

Vi'ola tri'color. Harts-ease. Pansies. This well-known beautiful little plant grows in corn-fields, waste and cultivated grounds, flowering all the summer months. It varies much by cultivation; and by the vivid colouring of its flowers often becomes extremely beautiful in gardens, where it is distinguished by various names. To the taste, this plant in its recent state is extremely glutinous, or mucilaginous, accompanied with the common herbaceous flavour and roughness. By distillation with water, according to Haase, it affords a small quantity of odorous essential oil, of a somewhat acrid taste. The dried herb yields about half its weight of watery extract, the fresh plant about one-eighth. Though many of the old writers on the Materia Medica represent this plant as a powerful medicine in epilepsy, asthma, ulcers, scabies, and cutaneous complaints, yet the viola tricolor owes its present character as a medicine to the modern authorities of Starck, Metzger, Haase, and others, especially as a remedy for the crusta lactea. For this purpose, a handful of the fresh herb, or half a drachm of it dried, boiled two hours in milk, is to be strained and taken night and morning. Bread, with this decoction, is also to be formed into a poultice and applied to the part. By this treatment, it has been observed, that the eruption during the first eight days increases, and that the urine, when the medicine succeeds, has an odour similar to that of cats; but on continuing the use of the plant a sufficient time, this smell goes off, the scabs disappear, and the skin recovers its natural purity. Instances of the successful exhibition of this medicine, as cited by these authors, are very numerous; indeed this remedy, under their management, seems rarely, if ever, to have failed. It appears, however, that Mursinna, Ackermann, and Henning, were less fortunate in the employment of this plant; the last of whom declares, that in the different cutaneous disorders in which he used it, no benefit was derived. Haase, who administered this species of violet in various forms, and large doses, extended its use to many chronic disorders; and from the great number of cases in which it proved successful, we are desirous of recommending it to a farther trial in this country.

It is remarkable that Bergius speaks of this plant as a useful mucilaginous purgative, and takes no notice of its efficacy in the crusta lactea, or in any other disease.

Viola'ria. See *Viola*.

Violet, dog. See *Viola canina*.

Violet, sweet. See *Viola odorata*.

Viper. See *Vipera*.

Viper-grass. See *Scorzonera*.

VI'PERA. (*Quod vi pariat*; because it was thought that its young eat through the mother's bowels.) The viper or adder. See *Coluber berus*.

Vipera'ria. See *Aristolochia serpentaria*.

Viperi'na. (From *vipera*, a snake; so called from the serpentine appearance of its roots.) See *Aristolochia serpentaria*.

Viperi'na virginia'na. See *Aristolochia serpentaria*.

Vi'rga au'rea. See *Solidago virga aurea*.

Virga'ta sutu'ra. The sagittal suture of the skull.

Virgina'le clau'strum. The hymen.

Virginian tobacco. See *Nicotiana*.

Virgin's bower, upright. See *Clematis recta*.

Virgin's milk. A solution of gum benzoin.

VI'RUS. A synonym of contagion. See *Contagion*.

VIS CONSERVA'TRIX. See *Vis medicatrix naturæ*.

VIS ELA'STICA. Elasticity.

VIS INE'RTIÆ. The propensity to rest inherent in nature.

VIS I'NSITA. This property is defined by Haller to be that power by which a muscle, when wounded, touched, or irritated, contracts, independent of the will of the animal that is the object of the experiment, and without its feeling pain. See *Irritability*.

VIS MEDICA'TRIX NATU'RÆ. *Vis conservatrix*. A term employed by physicians to express that healing power in an animated body, by which, when diseased, the body is enabled to regain its healthy actions.

VIS MO′RTUA. That property by which a muscle, after the death of the animal, or a muscle, immediately after having been cut out from a living body, contracts.

VIS NERVO′SA. This property is considered by Whytt to be another power of the muscles by which they act when excited by the nerves.

VIS PLA′STICA. That facility of formation which spontaneously operates in animals.

VIS A TE′RGO. Any impulsive power.

VIS VI′TÆ. The natural power of the animal machine in preserving life.

Vi′scum album. Mistletoe. This singular parasitical plant most commonly grows on apple-trees, also on the pear, hawthorn, service, oak, hazel, maple, ash, lime-tree, willow, elm, horn-beam, &c. It is supposed to be propagated by birds, especially by the field-fare and thrush, which feed upon its berries, the seeds of which pass through the bowels unchanged; and along with the excrement adhere to the branches of trees where they vegetate.

The mistletoe of the oak has, from the times of the antient druids, been always preferred to that produced on other trees; but it is now well known that the *viscus quercus* differs in no respect from others.

This plant is the ἰξ of the Greeks, and was in former times thought to possess many medicinal virtues; however, we learn but little concerning its efficacy from the antient writers on the Materia Medica, nor will it be deemed necessary to state the extraordinary powers ascribed to the mistletoe by the crafty designs of druidical knavery. Both the leaves and branches of the plant have very little smell, and a very weak taste of the nauseous kind. In distillation they impregnate water with their faint unpleasant smell, but yield no essential oil. Extracts, made from them by water, are bitterish, roughish, and subsaline. The spirituous extract of the wood has the greatest austerity, and that of the leaves the greatest bitterness. The berries abound with an extremely tenacious and most ungrateful sweet mucilage.

The viscus quercus obtained great reputation for the cure of epilepsy; and a case of this disease, of a woman of quality, in which it proved remarkably successful, is mentioned by Boyle. Some years afterwards its use was strongly recommended in various convulsive disorders by Colbach, who has related several instances of its good effects. He administered it in substance in doses of half a drachm, or a drachm, of the wood or leaves, or an infusion of an ounce. This author was followed by others, who have not only given testimony of the efficacy of the mistletoe in different convulsive affections, but also in those complaints denominated nervous, in which it was supposed to act in the character of a tonic. But all that has been written in favour of this remedy, which is certainly well deserving of notice, has not prevented it from falling into general neglect; and the colleges of London and Edinburgh have, perhaps not without reason, expunged it from their catalogues of the Materia Medica.

VI′SCUS. Any organ or part which has an appropriate use, as the viscera of the abdomen, &c.

Vision. See *Seeing.*

Vision, defective. See *Dysopia.*

Vi′sus defigura′tus. See *Metamorphopsia.*

Vi′tæ a′rbor. See *Arbor vitæ.*

Vi′tæ li′gnum. See *Guaiacum.*

Vital actions. See *Vital functions.*

VITAL FUNCTIONS. Vital actions. Those actions of the body upon which life immediately depends, as the circulation of the blood, respiration, heat of the body, &c. See *Action.*

Vital principle. See *Life.*

Vita′lba. Traveller's joy. See *Clematis recta.*

Vi′tex. (From *vieo*, to bind.) *Agnus castus.* The chaste tree. *Vitex agnus castus; foliis digitatis, serratis, spicis verticillatis,* of Linnæus. The seeds are the medicinal part, which have, when fresh, a fragrant smell, and an acrid aromatic taste. Formerly they were celebrated as antaphrodisiacs; but experience does not discover in them any degree of such virtue, and some have ascribed to them an opposite one. They are now fallen into disuse.

Vi′ti Sa′ltus. See *Chorea.*

VITILI′GO. (From *vitio*, to infect.) See *Alphus.*

VI′TIS. 1. The name of a genus of plants in the Linnæan system. Class, *Pentandria.* Order, *Monogynia.*

2. The pharmacopœial name of the grape. See *Vitis vinifera.*

Vi′tis a′lba. See *Bryonia alba.*

Vi′tis cori′nthica. This affords the *Uva passa minor. Passa corinthiaca.* The currant. The dried fruit of the *vitis corinthiaca.* Their virtues are similar to those of the raisin.

Vi′tis idæ′a. See *Vaccinium.*

Vi′tis sylve′stris. White bryony.

Vi′tis vini′fera. The systematic name of the grape-tree. *Vitis; foliis lobatis sinuatis nudis,* of Linnæus. Vine leaves and the tendrils have an adstringent taste, and were formerly used in diarrhœas, hæmorrhages, and other disorders requiring refrigerant and styptic medicines. The juice or sap of the vine, called lachryma, has been recommended in calculous disorders: and it is said to be an excellent application to weak eyes and specks of the cornea. The unripe fruit has a harsh, rough, sour taste; its expressed juice called verjuice, was formerly much esteemed, but is now superseded by the juice of lemons; for external use, however, particularly in bruises and pains, verjuice, is still employed, and considered to be a very useful application. The dried fruit is termed *Uva passa major. Passula major.* The raisin. Raisins are prepared by immersing the fresh fruit into a solution of alkaline salt and soap-ley, made boiling hot, to which is added some olive oil, and a small quantity of common salt, and afterwards drying them in the shade. They are used as agreeable, lubricating, acescent sweets in pectoral decoctions, and for obtunding the acrimony in other medicines, and rendering them grateful to the palate and stomach. They are directed in the *decoctum hordei compositum, tinctura sennæ,* and *tinctura cardamomi composita.* See also *Wine* and *Acetum.*

Vitra′ria. The pellitory of the wall.

VITREOUS HUMOUR. *Humor vitreus.* The pellucid body which fills the whole bulb of the eye behind the crystalline lens. The vitreous substance is composed of small cells which communicate with each other, and are distended with a transparent fluid.

Vitriol, acid of. See *Sulphuric acid.*

Vitriol, blue. See *Cupri sulphas.*

Vitriol, green. See *Ferri sulphas.*

Vitriol, Roman. See *Cupri sulphas.*

Vitriol, sweet spirit of. See *Spiritus ætheris sulphurici.*

Vitriol, white. See *Zinci sulphas.*

Vitriolated kali. See *Potassæ sulphas.*

Vitri′olum. (From *vitrum,* glass; so called from its likeness to glass. Hollandus says this word is fictitious, and composed from the initials of the following sentence: *Vade in terram rimando, invenies, optimum lapidem veram medicinam.*) *Calcadinum. Calcatar. Calcotar. Calcanthos. Calcanthum. Calcitea.* Vitriol, or sulphate of iron.

Vitri′olum a′lbum. See *Zinci sulphas.*

Vitri′olum cœru′leum. See *Cupri sulphas.*

Vitri′olum Roma′num. See *Cupri sulphas.*

Vitri′olum vi′ride. See *Ferri sulphas.*

VI′TRUM. Glass.

Vi′trum antimo′nii. Glass of antimony. Antimony first calcined, then fused in a crucible.

Vi′trum antimo′nii cera′tum. A diaphoretic compound exhibited in the cure of dysenteries arising from checked perspiration.

Vi′trum hypoclepti′cum. A funnel to separate oil from water.

VOICE. *Vox.* The principal organ of the voice is the larynx; for, when it is injured, the air passes through the windpipe without yielding any sound.

Volse′lla. A probang, or instrument to remove bodies sticking in the throat.

VO′LVULUS. (From *volvo,* to roll up.) The iliac passion, or inflammation in the bowels, called twisting of the guts.

Vo′lvulus terre′stris. Small bindweed. The convolvulus minor.

VO′MER. Named from its great resemblance to a plough-share. It is a slender thin bone separating the nostrils from each other, consisting of two plates much compressed together, very dense and strong, yet so thin as to be transparent; these two plates seem at every edge to separate from each other, and thus a groove is formed at every side. — 1. This groove on the upper edge, or, as it may be called its base, is wide, and receives into it the projecting points of the ethmoid and sphenoid bones, and thus it stands very firmly and securely on the skull, and capable of resisting blows of considerable violence. — 2. The groove, upon the lower part, is narrower, and receives the rising line in the middle of the palate plate, where the bones join to form the palate suture. At the fore-part it is united by a ragged surface, and by something like a groove, to the middle cartilage of the nose, and as the vomer receives the other bones into its grooves, it is as it were, locked in on all sides, receiving support and strength from each, but more particularly from the thick and strong membrane which covers the whole, and which is so continuous as to resemble a periosteum, or rather a continued ligament from its strength; thus the slender vomer possesses sufficient strength to avert from it all those evils which must inevitably have occurred, had it been less wisely or less strongly constructed.

VO′MICA. (From *vomo,* to spit up; because it discharges a sanies.) An abscess of the lungs.

Vo′mica liquo′ris æte′rni. Quicksilver.

VOMITING. *Vomitio.* A forcible ejection of food, or any other substance, from the stomach, through the œsophagus and mouth. It is either *idiopathic,* when arising from a cause in the stomach itself; or *symptomatic,* when originating from diseases seated in any other part of the body. Its immediate cause is an antiperistaltic, spasmodic, convulsive constriction of the stomach and pressure of the diaphragm and abdominal muscles. It is an effort of nature to expel whatever molests or is troublesome in the stomach.

Vomiting of blood. See *Hæmatemesis.*

Vo′mitus crue′ntus. See *Hæmatemesis.*

Voracious appetite. See *Bulimia.*

Vox absci′ssa. Hoarseness, a loss of voice.

Vulgago. The asarabacca was so called. See *Asarum.*

Vulneraria. (From *vulnus*, a wound.) Medicines which heal wounds. A herb named from its use in healing wounds.

Vulneraria aqua. Arquebusade.

Vulnus sclopeticum. A gun-shot wound.

VULVA. (*Quasi valva*, the aperture to the womb; or *quasi volva*, because the fœtus is wrapped up in it.) The pudendum muliebre, or parts of generation proper to women; also a foramen in the brain.

Vulvaria. (From *vulva*, the womb; so named from its smell, or use in disorders of the womb.) Stinking orach. See *Chenopodium vulvaria.*

W.

Wake robin. See *Arum.*

Wall-flower. See *Cheiranthus cheiri.*

Wall-pellitory. See *Parietaria.*

Wall-pepper. See *Sedum acre.*

Walnut. See *Juglans.*

WALTHER, Augustine Frederic, a physician, was appointed in 1723, professor of anatomy and surgery at Leyden. Several of his dissertations on anatomical subjects are commended, and have been reprinted by Haller. The best of his larger pieces is "De Lingua Humana Libellus," in quarto. As a botanist he published a Catalogue of the Plants in his own garden, and a work on the Structure of Plants. He died about the year 1746.

WALTON WATER. A mineral spring near Tewkesbury in Gloucestershire, containing a small portion of iron dissolved in fixed air; of absorbent earth combined with hepatic air; of vitriolated magnesia, and muriated mineral alkali; but the proportions of these constituent parts have not been accurately ascertained. Walton water is chiefly efficacious in obstructions and other affections of the glands.

WATER. *Aqua.* According to the opinion of modern chemists is a compound fluid, made up of two substances, neither of which can be exhibited separately, except in the gaseous form; and when aëriform, they are known, the one as hydrogen gas, or inflammable air; the other as oxygen gas, or vital air. These gases, in the proportion of about two measures of hydrogen to one of oxygen, when united chemically, and reduced from the form of an air to that of a liquid, constitute the fluid, water.

It is transparent, without colour, smell, or taste; in a very slight degree compressible; when pure, not liable to spontaneous change; liquid in the common temperature of our atmosphere, assuming the solid form at 32° Fahrenheit, and the gaseous at 212°, but returning unaltered to its liquid state on resuming any degree of heat between these points; capable of dissolving a greater number of natural bodies than any other fluid whatever, and especially those known by the name of the saline; performing the most important functions in the vegetable and animal kingdoms, and entering largely into their composition as a constituent part. The simple waters are the following:

1. *Distilled water.* This is the lightest of all others, containing neither solid nor gaseous substances in solution, is perfectly void of taste and smell, colourless and beautifully transparent, has a soft feel, and wets the fingers more readily than any other. It mixes uniformly with soap into a smooth opaline mixture, but may be added to a solution of soap in spirit of wine without injuring its transparency. The clearness of distilled water is not impaired by the most delicate chemical re-agents, such as lime-water, a solution of barytes in any acid, nitrated silver, or acid of sugar. When evaporated in a silver vessel it leaves no residuum; if preserved from access of foreign matter floating in the air, it may be kept for ages unaltered in vessels upon which it has no action, as it does not possess within itself the power of decomposition. As it freezes exactly at 32° of Fahrenheit, and boils at 212° under the atmospherical pressure of 29.8 inches, these points are made use of as the standard ones for thermometrical division; and its specific weight being always the same under the mean pressure and temperature, it is employed for the comparative standard of specific gravity.

Pure distilled water can only be procured from water which contains no volatile matters that will rise in distillation, and continue still in union with the vapour when condensed. Many substances are volatile during distillation, but most of the gases, such as common air, carbonic acid, and the like, are incapable of uniting with water at a high temperature: other bodies, however, such as vegetable essential oil, and, in general, much of that which gives the peculiar odour to vegetable and animal matter, will remain in water after distillation. So the steam of many animal and vegetable decoctions has a certain flavour which distinguishes it from pure water; and the aqueous exhalation from living bodies, which is a kind of distillation, has a similar impregnation.

To obtain distilled water perfectly pure, much stress was laid by former chemists on repeating the process a great number of times; but it was found by Lavoisier, that rain water once distilled, rejecting the first and last products, was as pure a water as could be procured by any subsequent distillations.

Distilled water appears to possess a higher power than any other as a solvent of all animal and vegetable matter, and these it holds in solution as little as possible altered from the state in which they existed in the body that yielded them. Hence the great practical utility of that kind of chemical analysis which presents the proximate constituent parts of these bodies, and which is effected particularly by the assistance of pure water. On the other hand, a saline, earthy, or otherwise impure water, will alter the texture of some of the parts, impair their solubility, produce material changes on the colouring matter, and become a less accurate analyser on account of the admixture of foreign contents.

Distilled water is seldom employed to any extent in the preparation of food, or in manufactures, on account of the trouble of procuring it in large quantities; but for preparing a great number of medicines, and in almost every one of the nicer chemical processes that are carried on in the liquid way, this water is an essential requisite. The only cases in which it has been used largely as an article of drink, have been in those important trials made of the practicability of procuring it by condensing the steam of sea water by means of a simple aparatus adapted to a ship's boiler; and these have fully shown the ease with which a large quantity of fresh water of the purest kind, may be had at sea, at a moderate expense, whereby one of the most distressing of all wants may be relieved. There are one or two circumstances which seem to show that water, when not already loaded with foreign matter, may become a solvent for concretions in urinary passages. At least, we know that very material advantage has been derived in these cases from very pure natural springs, and hence a course of distilled water has been recommended as a fair subject of experiment.

2. *Rain water*, the next in purity to distilled water, is that which has undergone a natural distillation from the earth, and is condensed in the form of rain. This is a water so nearly approaching to absolute purity as probably to be equal to distilled water for every purpose except in the nicer chemical experiments. The foreign contents of rain water appear to vary according to the state of the air through which it falls. The heterogeneous atmosphere of a smoky town will give some impregnation to rain as it passes through, and this, though it may not be at once perceptible on chemical examination, will yet render it liable to spontaneous change; and hence, rain water, if long kept, especially in hot climates, acquires a strong smell, becomes full of animalcula, and in some degree putrid. According to Margraaff, the constant foreign contents of rain water appear to be some traces of the muriatic and nitric acids; but as this water is always very soft, it is admirably adapted for dissolving soap, or for the solution of alimentary or colouring matter, and it is accordingly used largely for these purposes. The specific gravity of rain water is so nearly the same as that of distilled water, that it requires the most delicate instruments to ascertain the difference. Rain, that falls in towns, acquires a small quantity of sulphate of lime and calcareous matter from the mortar and plaister of the houses.

3. *Ice* and *snow water*. This equals rain water in purity, and, when fresh melted, contains no air, which is expelled during freezing. In cold climates and in high latitudes, thawed snow forms the constant drink of the inhabitants during winter; and the vast masses of ice which float on the polar seas afford an abundant supply to the mariner. It is well known, that in a weak brine, exposed to a moderate freezing cold, it is only the watery part that congeals, leaving the unfrozen liquor proportionably stronger of the salt. The same happens with a dilute solution of vegetable acids, with fermented liquors, and the like; and advantage is taken of this property to reduce the saline part to a more concentrated form. Snow water has long lain under the imputation of occasioning those strumous swellings in the neck which deform the inhabitants of many of the Alpine valleys; but this opinion is not supported by any well authenticated indisputable facts, and is rendered still more improbable, if not entirely overturned, by the frequency of the disease in Sumatra, where ice and snow are never seen, and its being quite unknown in Chili and in Thibet, though the rivers of these countries are chiefly supplied by the melting of the snow, with which the mountains are covered.

4. *Spring water*. Under this comprehensive class are included all waters that spring from some depth beneath the soil, and are used at the fountain head, or at least before they have run any considerable distance exposed to the air. It is obvious that spring water will be as various in its contents as the substances that compose the soil through

which it flows. When the ingredients are not such as to give any peculiar medical or sensible properties, and the water is used for common purposes, it is distinguished as a hard or soft spring, sweet or brackish, clear or turbid, and the like. Ordinary springs insensibly pass into mineral springs, as their foreign contents become more notable and uncommon; though sometimes waters have acquired great medical reputation from mere purity.

By far the greater number of springs are cold; but as they take their origin at some depth from the surface, and below the influence of the external atmosphere, their temperature is, in general, pretty uniform during every vicissitude of season, and always several degrees higher than the freezing point. Others, again, arise constantly hot, or with a temperature always exceeding the summer heat; and the warmth possessed by the water is entirely independent of that of the atmosphere, and varies little winter or summer.

One of the principal inconveniencies in almost every spring water, is its hardness, owing to the presence of earthy salts, which, in by far the greater number of cases, are only the insipid substances, chalk, and selenite, which do not impair the taste of the water; whilst the air which it contains, and its grateful coolness, render it a most agreeable, and generally a perfectly innocent drink; though sometimes, in weak stomachs, it is apt to occasion an uneasy sense of weight in that organ followed by a degree of dyspepsia. The quantity of earthy salts varies considerably; but, in general, it appears that the proportion of five grains of these in the pint will constitute a hard water, unfit for washing with soap, and for many other purposes of household use or manufactures. The water of deep wells is always, *ceteris paribus*, much harder than that of springs which overflow their channel; for much agitation and exposure to air produce a gradual deposition of the calcareous earth; and hence spring water often incrusts to a considerable thickness the inside of any kind of tube through which it flows, as it arises from the earth. The specific gravity of these waters is also, in general, greater than that of any other kind of water, that of the sea excepted. Springs that overflow their channel, and form to themselves a limited bed, pass insensibly into the state of stream, or river water, and become thereby altered in some of their chemical properties.

5. *River water.* This is in general much softer and more free from earthy salts than the last, but contains less air of any kind: for, by the agitation of a long current, and in most cases a great increase of temperature, it loses common air and carbonic acid, and, with this last, much of the lime which it held in solution. The specific gravity thereby becomes less, the taste not so harsh, but less fresh and agreeable, and out of a hard spring is often made a stream of sufficient purity for most of the purposes where a soft water is required. Some streams, however, that arise from a clean siliceous rock, and flow in a sandy or stony bed, are from the outset remarkably pure. Such are the mountain lakes and rivulets in the rocky districts of Wales, the source of the beautiful waters of the Dee, and numberless other rivers that flow through the hollow of every valley. Switzerland has long been celebrated for the purity and excellence of its waters, which pour in copious streams from the mountains; and give rise to some of the finest rivers in Europe. An excellent observer and naturalist, the illustrious Haller, thus speaks of the Swiss waters, "vulgaribus aquis Helvetia super omnes fere Europæ regiones excellit. Nusquam liquidas illas aquas & crystalli simillimas se mihi obtulisse memini postquam ex Helvetia excessi. Ex scopulis enim nostræ per puros silices percolatæ nulla terra vitiantur." Some of them never freeze in the severest winter, the cause of which is probably, as Haller conjectures, that they spring at once out of a subterraneous reservoir so deep as to be out of the reach of frost, and during their short course when exposed to day they have not time to be cooled down from 53°, their original temperature, to below the freezing point.

Some river waters, however, that do not take their rise from a rocky soil, and are indeed at first considerably charged with foreign matter, during a long course, even over a rich cultivated plain, become remarkably pure as to saline contents, but often fouled with mud, and vegetable or animal exuviæ, which are rather suspended than held in true solution. Such is that of the Thames, which, taken up at London at low water, is a very soft and good water, and, after rest and filtration, it holds but a very small portion of any thing that could prove noxious or impede any manufacture. It is also excellently fitted for sea-store; but it here undergoes a remarkable spontaneous change. No water carried to sea becomes putrid sooner than that of the Thames. When a cask is opened after being kept a month or two, a quantity of inflammable air escapes, and the water is so black and offensive as scarcely to be borne. Upon racking it off, however, into large earthen vessels (oil jars are commonly used for the purpose), and exposing it to the air, it gradually deposits a quantity of black slimy mud, becomes clear as chrystal, and remarkably sweet and palatable. The Seine has as high a reputation in France, and appears from accurate experiments to be a river of great purity. It might be expected that a river which has passed by a large town, and received all its impurities, and been used by numerous dyers, tanners, hatters, and the like, that crowd to its banks for the convenience of plenty of water, should thereby acquire such a foulness as to be very perceptible to chemical examination for a considerable distance below the town; but it appears, from the most accurate examination, that where the stream is at all considerable, these kinds of impurity have but little influence in permanently altering the quality of the water, especially as they are for the most part only suspended and not truly dissolved; and, therefore, mere rest, and especially filtration, will restore the water to its original purity. Probably, therefore, the most accurate chemist would find it difficult to distinguish water taken up at London, from that procured at Hampton Court, after each has been purified by simple filtration.

6. *Stagnated Waters.* The waters that present the greatest impurities to the senses, are those of stagnant pools, and low marshy countries. They are filled with the remains of animal and vegetable matter undergoing decomposition, and, during that process, becoming in part soluble in water, thereby affording a rich nutriment to the succession of living plants and insects which is supplying the place of those that perish. From the want of sufficient agitation in these waters, vegetation goes on undisturbed, and the surface becomes covered with conferva and other aquatic plants; and as these standing waters are in general shallow, they receive the full influence of the sun, which further promotes all the changes that are going on within them. The taste is generally vapid, and destitute of that freshness and agreeable coolness which distinguish spring water. However, it should be remarked, that stagnant waters are generally soft, and many of the impurities are only suspended, and therefore separable by filtration; and perhaps the unpalatableness of this drink has caused it to be in worse credit than it deserves, on the score of salubrity. The decidedly noxious effects produced by the air of marshes and stagnant pools, have been often supposed to extend to the internal use of these waters; and often, especially in hot climates, a residence near these places has been as much condemned on one account as on the other, and, in like manner, an improvement in health has been as much attributed to a change of water as of air.

Water-brash. See *Pyrosis.*

Water-cress. See *Sisymbrium nasturtium.*

Water-dock. See *Rumex hydrolapathum.*

Water-flag, yellow. See *Iris pseudacorus.*

Water-germander. See *Teucrium scordium.*

Water-hemp. See *Eupatorium.*

Water-lily, white. See *Nymphæa alba.*

Water-lily, yellow. See *Nymphæa lutea.*

Water-parsnep. See *Sium.*

Water-pepper. See *Polygonum hydropiper.*

Water zizania. A reed-like plant, *zizania aquatica*, of Linnæus, which see.

Waters, mineral. See *Mineral waters.*

Wax. See *Cera.*

WEDEL, George Wolffgang, was born in 1645, at Golzan in Lusatia, and graduated at Jena in 1667; where, after a temporary exercise of his profession at Gotha, he became medical professor; in which station he continued with reputation for almost half a century. He combined with his skill in medicine a considerable acquaintance with mathematics and philology, as well as with the oriental and classical languages. He was an associate to the Academy Naturæ Curiosorum, and to the Royal Society of Berlin, physician to several German sovereigns, a count palatine, and an imperial counsellor. Notwithstanding these high offices and numerous engagements, he was attentive to the poor, and assiduous in his literary labours. He is celebrated for his pharmaceutical knowledge, and his elegance of prescription, so that many of his compositions have been adopted in dispensatories. Of his works, besides his academical dissertations, the principal are, "Opiologia;" "Pharmacia in Artis formam redacta;" "De Medicamentorum Facultatibus;" "De Morbis Infantum;" and "Exercitationes Medico-Philologicæ."

WEPFER, John James, was born in 1620 at Schaffhausen, and after visiting several universities in Italy, graduated at Basil, and settled in his native place. His reputation was extensive there and in Germany, and he attained, by his dissections and experiments, a high rank among those who have contributed to improve medical science. In 1658, he published a celebrated work, entitled "Observationes Anatomicæ, &c." since often reprinted with the title of "Historia Apoplecticorum." In an epistle "De Dubiis Anatomicis," he asserted the entire glandular structure of the liver, prior to Malpighi. Another valuable work is called "Cicutæ Aquaticæ Historia et Noxæ." His constitution was injured by attendance, at an advanced age, on the duke of Wurtemburg, and the imperial army under his command; and he was carried off by a dropsy in 1695. His papers were published by two of his grandsons in a work entitled "Observationes Medico-Practicæ, &c." To the Ephemerides Naturæ Curiosorum he made several valuable communications, being a member of that society.

WHARTON, Thomas, was born in Yorkshire in 1610, and educated at Cambridge. He afterwards became a private tutor at Oxford: but on the commencement of the civil wars he removed to London, and engaged in the practice of physic. On the surrender of Oxford to the parliament in 1646, he obtained a doctor's degree there, became a member of the College of Physicians in London, and got into considerable practice. In 1652 he read lectures on the glands before the college, and he afterwards published a work on that subject, entitled "Adenographia;" the descriptions cannot be relied upon, being chiefly taken from brutes; yet there are some useful observations on the diseases of those organs. His name has been affixed to the salivary ducts on the side of the tongue.

WHEAT. The seeds of the *Triticum hibernum*, and *æstivum*, of Linnæus, are so termed. It is to these plants therefore we are indebted for our bread, and the various kinds of pastry. Wheat is first ground between mill-stones, and then sifted to obtain its farina or flour. The flour of wheat may be separated into its three constituent parts, in the following manner. The flour is to be kneaded into a paste with water in an earthen vessel, and the water continue pouring upon it from a cock; this liquid, as it falls upon the paste, takes up from it a very fine white powder, by means of which it acquires the colour and consistency of milk. This process is to be continued till the water run off clear, when the flour will be separated into three distinct parts: 1. A grey elastic matter that sticks to the hand, and on account of its properties has gained the name of the glutinous, or vegeto-animal part. 2. A white powder which falls to the bottom of the water, and is the *fæculum* or starch. 3. A matter which remains dissolved in the water, and seems to be a sort of mucilaginous extract.

Flour, from whatever species of corn obtained, is likewise disposed to vinous fermentation, on account of its saccharine contents, the aptitude for fermentation of these mealy seeds increases if they be first converted into malt; inasmuch as by this process, the gluten which forms the germ is separated, and the starchy part appears to be converted into saccharine matter. The making of malt, for which purpose barley and wheat are generally chosen, is as follows: The grains are put in the malting tub, and immersed in cold water, in a temperate and warm season, changing this fluid several times, especially in hot weather, and they are thus kept soaking till they be sufficiently soft to the touch. Upon this they are piled up in heaps on a roomy, clean, airy floor, where, by the heat spontaneously taking place, the vegetation begins, and the grains germinate. To cause the germination to go on uniformly the heaps are frequently turned. In this state the vegetation is suffered to continue till the germs have about two-thirds or three-fourths of the length of the corn. It is carried too far when the leafy germs have begun to sprout.

For this reason, limits are set to the germination by drying the malt, which is effected by transferring it to the kiln, or by spreading it about in spacious airy lofts. Dried in the last way, it is called air-dried malt, in the first kiln-malt. In drying this latter, care must be taken that it does not receive a burnt smell, or be in part converted into coal.

From this malt, beer is made by extraction with water and fermentation.

With this view, a quantity of malt freed from its germs, and sufficient for one intended brewing, is coarsely bruised by grinding, and in the mash-tub first well mixed with some cold, then scalded with hot-water, drawn upon it from the boiler. It is afterwards strongly and uniformly stirred. When the whole mass has stood quietly for a certain time, the extract, (mash,) or sweet wort, is brought into the boiler, and the malt remaining in the tub is once more extracted by infusion with hot water.

This second extract, treated in like manner, is added to the first, and both are boiled together.

This clear decoction is now drawn off, and called boiled wort. To make the beer more fit for digestion, and at the same time to deprive it of its too great and unpleasant sweetness, the wort is mixed with a decoction of hops, or else these are boiled with it. After which it ought to be quickly cooled, to prevent its transition into acetous fermentation, which would ensue if it were kept too long in a high temperature.

On this account the wort is transferred into the cooler, where it is exposed with a large surface to cold air, and from this to the fermenting tub, that by addition of a sufficient portion of recent yeast it may begin to ferment. When this fermentation has proceeded to a due degree, and the yeast ceases to rise, the beer is conveyed into casks (casked), placed in cool cellars, where it finishes its fermentation, and where it is well kept and preserved, under the name of barrelled beer, with the precaution of filling up occasionally the vacancy caused in the vessels by evaporation; or the beer is bottled before it has done fermenting, and the bottles are stopped a little before the fermentation is completely over. By so doing the bottled beer is rendered sparkling. In this state it frequently bursts the bottles, by the disengagement of the carbonic acid gas which it contains, and it strongly froths, like Champaign, when brought into contact with air on being poured into another vessel.

Beer well prepared should be limpid

and clear, possess a due quantity of spirit, and excite no disagreeable sweet taste, and contain no disengaged acid. By these properties it is a species of vinous beverage, and is distinguished from wine in the strict sense, and other liquors of that kind, by the much greater quantity of mucilaginous matter which it has received by extraction from the malted grains, but which also makes it more nourishing. Brown beer derives its colour from malt strongly roasted in the kiln, and its bitterish taste from the hops. Pale beer is brewed from malt dried in the air, or but slightly roasted, with but little or no hops at all.

Wheat, buck. See *Polygonum fagopyrum.*

Wheat, Eastern buck. See *Polygonum divaricatum.*

Wheat, Indian. See *Zea mays.*

WHEAT, TURKEY. The Turkey wheat is a native of America, where it is much cultivated, as it is also in some parts of Europe, especially in Italy and Germany. There are many varieties, which differ in the colour of the grain, and are frequently raised in our gardens by way of curiosity, whereby the plant is well known. It is the chief bread corn in some of the southern parts of America, but since the introduction of rice into Carolina, it is but little used in the northern colonies. It makes a main part too of the food of the poor people in Italy and Germany. This is the sort of wheat mentioned in the book of Ruth, where it is said that Boaz treated Ruth with parched ears of corn dipped in vinegar. This method of eating the roasted ears of Turkey wheat is still practised in the East; they gather in the ears when about half ripe, and having scorched them to their minds, eat them with as much satisfaction as we do the best flour bread.

In several parts of South America they parch the ripe corn, never making it into bread, but grinding it between two stones, mix it with water in a calabash, and so eat it. The Indians make a sort of drink from this grain, which they call bici. This liquor is very windy and intoxicating, and has nearly the taste of sour small beer: but they do not use it in common, being too lazy to make it often, and therefore it is chiefly kept for the celebration of feasts and weddings, at which times they mostly get intolerably drunk with it. The manner of making this precious beverage, is to steep a parcel of corn in a vessel of water, till it grows sour, then the old women being provided with calabashes for the purpose, chew some grains of the corn in their mouths, and spitting it into the calabashes, empty them spittle and all, into the sour liquor, having previouly drawn off the latter into another vessel.

The chewed grain soon raises a fermentation, and when this ceases, the liquor is let off from the dregs, and set by till wanted. In some of the islands in the South Sea, where each individual is his own lawgiver, it is no uncommon thing for a near relation to excuse a murderer for a good drunken bout of ciri.

WHISPERING. A lowness of speech, caused by uttering the words so feebly, as not to produce any vibration of the larynx.

White swelling. See *Arthropuosis* and *Hydarthrus.*

WHITES. *Leucorrhœa. Fluor albus.* This disease is marked by the discharge of a thin white or yellow matter from the uterus and vagina, attended likewise with some degree of fœtor, smarting in making water, pains in the back and loins, anorexia and atrophy. In some cases, the discharge is of so acrid a nature, as to produce effects on those who are connected with the woman, somewhat similar to venereal matter, giving rise to excoriations about the glans penis and præputium, and occasioning a weeping from the urethra.

To distinguish leucorrhœa from gonorrhœa, it will be very necessary to attend to the symptoms. In the latter the running is constant; but in a small quantity; there is much ardor urinæ, itching of the pudenda, swelling of the labia, increased inclination to venery, and very frequently an enlargement of the glands in the groin; whereas in the former the discharge is irregular, comes away often in large lumps, and in considerable quantities, and is neither preceded by nor accompanied with any inflammatory affection of the pudenda.

Immoderate coition, injury done to the parts by difficult and tedious labours, frequent miscarriages, immoderate flowings of the menses, profuse evacuations, poor diet, an abuse of tea, and other causes, giving rise to general debility, or to a laxity of the parts more immediately concerned, are those which usually produce the whites, vulgarly so called, from the discharge being commonly of that colour.

Fluor albus, in some cases, indicates that there is a disposition to disease in the uterus, or parts connected with it, especially where the quantity of the discharge is very copious, and its quality highly acrimonious. By some the disease has been considered as never arising from debility of the system, but as being always a primary affection of the uterus. Delicate women, with lax fibres, who remove from a cold climate to a warm one, are, however, very apt to be attacked with it, without the parts having previously sustained any kind of injury.

The disease shews itself by an irregular discharge from the uterus and vagina of a fluid which, in different women, varies much in colour, being either of a white, green, yellow, or brown hue. In the beginning it is, however, most usually white and pellucid, and in the progress of the complaint acquires the various discolourations, and different degrees of acrimony, from whence proceeds a slight degree of smarting in making water. Besides the discharge, the patient is frequently afflicted with severe and constant pains in the back and loins, loss of strength, failure of appetite, dejection of spirits, paleness of the countenance, chilliness, and languor. Where the disease has been of long continuance, and very severe, a slow fever, attended with difficult respiration, palpitations, faintings, and anasarcous swellings of the lower extremities, often ensues.

A perfect removal of the disorder will at all times be a difficult matter to procure; but it will be much more so in cases of long standing, and where the discharge is accompanied with a high degree of acrimony. In these cases, many disorders, such as prolapsus uteri, ulcerations of the organ, atrophy and dropsy, are apt to take place, which in the end prove fatal.

Where the disease terminates in death, the internal surface of the uterus appears, on dissection, to be pale, flabby, and relaxed; and where organic affections have arisen, much the same appearances are to be met with as have been noticed under the head of menorrhagia.

Whortle-berry, bears. See *Arbutus uva ursi.*

Whortle-berry, red. See *Vaccinium vitis idæa.*

WHYTT, Robert, was born in 1714 at Edinburgh, where he studied physic, and after visiting the medical schools at London, Paris, and Leyden, settled in the exercise of his profession, became a fellow, then president of the college, and chairman of the Institutions of Medicine in that university. As a medical practitioner and teacher, and also as a writer, he acquired deserved celebrity. The first of his publications was an "Essay on the vital and other involuntary Motions of Animals," 1751, in which he opposed the Stahlian Theory, and ascribed them to the operation of stimuli. Four years after his "Physiological Essays," appeared, in which he supposes the circulation assisted by an oscillatory motion of the minute vessels, and treats of sensibility and irritability. He also wrote on the Use of Lime-water in Calculous Complaints; and on Nervous Diseases; and contributed likewise some papers to the Edinburgh Essays. The Observations on Hydrocephalus, were published after his death, which occurred in 1766, after labouring long under a complication of chronic complaints.

Widow-wail. See *Daphne mezereum.*

Wild carrot. See *Daucus sylvestris.*

Wild cucumber. See *Momordica elaterium.*

Wild navew. See *Brassica napus.*

WILLIS, Thomas, was born in Wiltshire about the year 1621, and entered at Oxford with a view to the clerical profession; but he afterwards changed to physic, took his batchelor's degree in 1646, and commenced practice at the university. He distinguished himself by his steady attachment to the Church of England, and also by his love of science, so that he became one of the first members of that philosophical society at Oxford, which laid the foundation of the Royal Society of London. He was ambitious of excelling as a chemist, and published in 1659 a treatise on Fermentation, and another on Fevers, with a dissertation on the Urine. After the Restoration he was appointed to the Sedleian professorship of Natural Philosophy, and received his doctor's degree. In 1664 he published his celebrated work "Cerebri Anatome," with a description of the Nerves; which was followed after three years by his "Pathologia Cerebri et Nervosi Generis," in which he treats of Convulsive Diseases, and the Scurvy. In the mean time he had settled in London, and being nominated a physician in ordinary to the King, was advancing to the first rank in practice. His next publication was on Hysteria and Hypochondriasis. In 1672 he produced another work, "De Anima Brutorum;" which he supposed like the vital principle in man of a corporeal nature. The year following he began to print his "Pharmaceutice Rationalis," which he did not live to complete, being carried off by a pleurisy in his fifty-fourth year. His works engaged great attention at first, and are still admired, though modern improvements have diminished their value. They are written in an elegant Latin style.

Willow, crack. See *Salix.*

Willow, sweet. See *Myrica gale.*

Willow, white. See *Salix.*

Willow-herb. See *Lythrum salicaria.*

Willow-herb, rosebay. See *Epilobium angustifolium.*

Willow-leaved oak. See *Quercus phellos.*

WINE. *Vinum.* The fermented juice of the ripe fruit of the *Vitis vinifera,* of Linnæus; which see. The wines principally used in medicine are, the *vinum album hispanicum,* or sherry, *vinum canarium,* canary or sack wine, the *vinum rhenanum,* or Rhenish wine, and the *vinum rubrum,* or Port wine. On a chemical investigation, all wines consist chiefly of water and alkohol, besides some vegetable acid, the carbonic acid, tartar, and an adstringent gummi-resinous matter in which the colour of the red wine resides, and which is expressed from the husks of the grape. They differ from each other in the proportion of these ingredients, and particularly in that of alkohol, which they contain. The qualities of wines depend not only upon the difference of the grapes, as containing more or less of saccharine juice and the acid matter which accompanies it, but also upon circumstances attending the process of fermentation. New wines are liable to a strong degree of acescency when taken into the stomach, and thereby occasion much flatulency and eructations of acid matter; heartburn and violent pains in the stomach from spasms are also often produced; and the acid matter, by passing into the intestines and mixing with the bile, is apt to occasion colics or excite diarrhœas. Sweet wines are likewise more disposed to become acescent in the stomach than others: but as the quantity of alkohol which they contain is more considerable than appears sensibly to the taste, their acescency is thereby in a great measure counteracted. Red port, and most of the red wines have an adstringent quality, by which they strengthen the stomach, and prove useful in restraining immoderate evacuations; on the contrary, those which are of an acid nature, as Rhenish, pass freely by the kidneys, and gently loosen the belly. But this, and perhaps all the thin or weak wines, though of an agreeable flavour, yet as containing little alkohol, are readily disposed to become acid in the stomach, and thereby to aggravate all arthritic and calculous complaints, as well as to produce the effects of new wine. The general effects of wine are, to stimulate the stomach, exhilarate the spirits, warm the habit, quicken the circulation, promote perspiration, and, in large quantities, to prove intoxicating, and powerfully sedative. In many disorders, wine is universally admitted to be of important service, and especially in fevers of the typhus kind, or of a putrid tendency; in which it is found to raise the pulse, support the strength, promote a diaphoresis, and to resist putrefaction; and in many cases it proves of more immediate advantage than the Peruvian bark. Delirium, which is the consequence of excessive irritability, and a defective state of nervous energy, is often entirely removed by the free use of wine. It is also a well-founded observation, that those who indulge in the use of wine are less subject to fevers of the malignant and intermittent kind. In the putrid sore throat, in the small-pox, when attended with great debility and symptoms of putridity, in gangrenes, and in the plague, wine is to be considered as a principal remedy; and in almost all cases of languor, and of great prostration of strength, wine is experienced to be a more grateful and efficacious cordial than can be furnished from the whole class of aromatics.

Method of discovering whether Wine has been adulterated with any Metals prejudicial to health. — The property which the sulphuret of potash and hepatic air, or sulphuretted hydrogen, possess of precipitating lead in a black form, has been long ago made public; and this property has been employed to determine the quality of wines by means of the liquor probatorius Wirtembergensis, or Wirtemberg proving-liquor. But in trying wines supposed to have been adulterated, this proof does more harm than service, because it precipitates iron of the same colour as the pernicious lead. Many wine-merchants of the greatest respectability rendered by these means suspected, have been ruined. There was wanting then a reagent, which should discover in wine those metals only which are prejudicial to the health of man.

The following liquor, precipitates lead and copper in a black form, and arsenic of an orange colour, &c. but does not precipitate iron, which is not noxious, and rather salutary to the constitution, and frequently gets into wines by accident.

Method of preparing the Proving Liquor.— Mix equal parts of oyster-shells and crude sulphur in a fine powder, and put the mixture into a crucible; heat it in a wind furnace, and increase the fire suddenly, so as to bring the crucible to a white heat, for the space of fifteen minutes; pulverize the mass when it is cold, and preserve it in a bottle closely stopped. To prepare the liquor, put 120 grains of this powder, and 120 grains of cream of tartar (supertartrate of potash) into a strong bottle; fill the bottle with common water, which boil for an hour, and then let it cool; close the bottle immediately, and shake it for some time; after it has remained at rest to settle, decant the pure liquor, and pour it into small phials, capable of holding about an ounce each, first putting into each of them twenty drops of muriatic acid. They must be stopped very closely with a piece of wax, in which there is a small mixture of turpentine. One part of this liquor mixed with three parts of suspected wine, will discover, by a very sensible black precipitate, the least traces of lead, copper, &c. but will produce no effect upon iron, if it contains any of that metal. When the precipitate has fallen down, it may still be discovered whether the wine contains iron, by saturating the decanted liquor with a little salt of tartar, by which the liquor will immediately become black. Pure wines remain clear and bright after this liquor has been added to them.

WINSLOW, James Benignus, was born in 1669, in the Isle of Funen, and having studied a year under Borrichius, was sent, with a pension, from the King of Denmark to seek improvement in the principal universities of Europe. In 1698 he became a pupil of the celebrated Duverney, at Paris, where he was induced to abjure the Protestant religion; and the patronage of Bossuet, who converted him, procured for him the degree of doctor in 1705. He afterwards read lectures of anatomy and surgery at the Royal Garden; and in 1743 was promoted to the professorship in that institution. In the mean time he communicated several papers on anatomical and physiological subjects to the Academy of Sciences, by whom, as well as by the Royal Society of Berlin, he was admitted an associate. His great work, mentioned by Haller, as superseding all former compositions of anatomy, and entitled "Exposition Anatomique de la Structure du Corps Humain," first appeared at Paris in 1732, 4to. It was frequently reprinted, and translated into various languages; and is still regarded as of standard authority. It was intended as a plan of a larger work, which, however, he did not finish. He reached the advanced age of ninety-one.

Winter bark. See *Winteranus cortex.*

Winter cherry. See *Physalis alkekengi.*

WINTE'RA AROMA'TICA. The systematic name of the winter bark tree. See *Winteranus cortex.*

WINTERA'NUS CO'RTEX. *Winteranus cortex magellanicus.* The bark of the *Wintera aromatica, pedunculis aggregatis terminalibus, pistillis quatuor;* it is very much allied in its properties to the *canella alba.* See *Canella alba.*

WINTERA'NUS SPU'RIUS. See *Canella alba.*

WISEMAN, RICHARD, was first known as a surgeon in the civil wars of Charles I., and accompanied Prince Charles, when a fugitive, in France, Holland, and Flanders. He served for three years in the Spanish navy, and returning with the prince to Scotland, was made prisoner in the battle of Worcester. After his liberation in 1652 he settled in London. When Charles II. was restored, he became eminent in his profession, and was made one of the serjeant-surgeons to the king. In 1676 he appears, from the preface to his works, to have been a sufferer by ill health for twenty years; but the time of his death is not known. The result of his experience was given in "Several Surgical Treatises on Tumours, Ulcers, Diseases of the Anus, Scrofula, Wounds, Gunshot Wounds, Fractures and Luxations, and Syphilis." He seems to have given a faithful account of more than six hundred cases, recording his failures as well as his cures. He advocated the efficacy of the royal touch in scrophula, though the fallacy is evident even from his own narration. His writings have long been regarded as standard authority.

WITHERING, WILLIAM, was born in 1741, and finished his medical education at Edinburgh, where he took his degree at twenty-five. From Stafford, where he first settled and married, he removed to Birmingham, and speedily attained a very extensive practice by his skill and assiduity, without neglecting his scientific pursuits, which were chiefly in botany and chemistry. He was author of several valuable publications: "A Botanical Arrangement of British Plants," which appeared at first in 1776, in two volumes, 8vo., but progressively increased to four; a translation of Bergman's "Sciagraphia Regni Mineralis;" and some chemical and mineralogical papers contributed to the Royal Society, of which he was a fellow. "Account of the Scarlet Fever, &c.;" "Account of the Fox-glove," with practical remarks on the Dropsy and other diseases, published in 1785. His lungs being weak, he found it necessary in the winter of 1793 to go to Lisbon, and afterwards to relax from his professional exertions. His death occurred in 1799.

Wolfs' bane. See *Aconitum.*

Wolfs' bane, blue. See *Aconitum.*

Womb. See *Uterus.*

Womb, inflammation of. See *Hysteritis.*

Wood-louse. See *Oniscus asellus.*

Wood-sorrel. See *Oxalis acetosella.*

WOODVILLE, WILLIAM, was born at Cockermouth in 1752. After serving a short apprenticeship to an apothecary, he graduated at Edinburgh in 1775. Then passing some time on the continent, he settled near his native place, and practised there for five or six years. He next came to London, and was soon appointed a physician to the Middlesex Dispensary. In 1790 he published the first part, which was afterwards completed in four quarto volumes, of a highly valuable work, entitled "Medical Botany." The following year he was elected physician to the Small-pox Hospital; and in executing the duties of that office he displayed the highest zeal. He gave a manifest proof of his attention to the subject, by publishing in 1796 the first part of a "History of the Small-pox in Great-Britain, &c.;" but the discovery of vaccination superseded the necessity of completing that work. Dr. Woodville was duly impressed with the importance of what had been announced by Dr. Jenner; but feeling a proper degree of scepticism at first, he was anxious to investigate the practice fully, before he gave it his sanction. Unfortunately he was led into an error at the outset, by not keeping in recollection, that the atmosphere of the hospital was loaded with variolous contagion, whence some unpleasant results appeared; but this being suggested to him, he was induced, on more mature consideration, strenuously to advocate the practice of vaccination; and by the excellent opportunities he enjoyed, he contributed very materially to its rapid success. He died in 1805.

WOODWARD, JOHN, was born in Derbyshire in 1664, and put apprentice to some trade in London; but evincing an ardour for science, Dr. Barwick took him into his family, and for four years instructed him in medicine and anatomy; after which he procured him the medical professorship at Gresham College. He published about this time an essay towards a Natural History of the Earth, which, though executed without sufficient preparation, procured his election into the Royal Society. In 1695 he was created M. D. by Archbishop Tenison, and the year after obtained the same degree from Cambridge; whence he was admitted into the College of Physicians as a fellow in 1702. He, however, pursued his enquiries into natural history and antiquities for some time with great zeal. In 1718 he published a work, entitled "The State of Physic and of Diseases," containing some fanciful theories, which were ably confuted by Dr. Freind, both ludicrously and seriously. He died at Gresham College in 1727, bequeathing his personal property to the university of Cambridge, for the endowment of an annual lectureship, on some subject taken from his own writings. Soon after his death a catalogue of his fossils was published, and in 1737, his "Select Cases and Consultations in Physic," containing some valuable observations. He supposed the vital principle to reside not in the nerves but in the blood, and other parts of the body; and he made many experiments to establish the vis insita of muscles.

Woody nightshade. See *Solanum dulcamara.*

Worm-bark. See *Geoffræa.*

Worm-grass, perennial. See *Spigelia.*

Worm, guinea. See *Dracunculus.*

Worm, ring. See *Herpes.*

WORMS. *Vermes.* There are several kinds of animals which infest the human body. Their usual division is into those which inhabit only the intestinal canal, as the ascarides, &c.; and those which are found in other parts, as hydatids, &c. Such is the nature and office of the human stomach and intestines, that insects and worms, or their ovula, may not unfrequently be conveyed into that canal with those things, that are continually taken as food; but such insects, or worms, do not live long, and seldom, if ever, generate in a situation so different from their natural one. Besides these, there are worms that are never found in any other situation than the human stomach, or intestines, and which there generate and produce their species. Thus it appears that the human stomach and intestines are the seat for animalcula, which are translated from their natural situation, and also for worms proper to them, which live in no other situation.

First Class.

This contains those which are generated and nourished in the human intestinal canal, and which there propagate their species.

Second Class

Comprehends those insects or worms that accidentally enter the human primæ viæ ab extra, and which never propagate their species in that canal, but are soon eliminated from the body; such are several species of *Scarabæi*, the *Lumbricus terrestris*, the *Fasciola*, the *Gordius intestinalis*, and others. The second class belongs to the province of natural history. The consideration of the first class belongs to the physician, which, from the variety it affords, may be divided into different orders, genera, and species.

Order I. Round worms.

Genus I. Intestinal ascarides.

Character. Body round, head obtuse, and furnished with three vesicles.

Species I. *Ascaris lumbricoides.* The long round worm, or lumbricoid ascaris.

Character. When full grown, a foot in length. Mouth triangular.

II. *Ascaris vermicularis.* The thread or maw-worm.

Character. When full grown, half an inch in length, tail terminates in a fine point.

Genus II. Intestinal trichurides.

Character. Body round, tail three times the length of the body, head without vesicles.

Species. *Trichuris vulgaris.* The trichuris, or long thread-worm.

Character. The head furnished with a proboscis.

Order II. The flat worms.

Genus I. Intestinal tape-worm.

Character. Body flat and jointed.

Species I. *Tænia osculis marginalibus.* The long tape-worm.

Character. The oscula are situated upon the margin of the joints.

II. *Tænia osculis superficialibus.* The broad tape-worm.

Character. The oscula are placed upon the flattened surface.

These worms were all known to the antients, the trichuris only excepted, and are mentioned in the works of Hippocrates, Galen, Celsus, Paulus Ægineta, and Pliny.

Worms may readily be distinguished by the following symptoms, viz. variable appetite, fœtid breath, acid eructations and pains in the stomach, grinding of the teeth during sleep, picking of the nose, paleness of the countenance; sometimes dizziness, hardness and fulness of the belly; slimy stools, with occasional griping pains, more particularly about the navel, heat and itching about the anus; short dry cough; emaciation of the body; slow fever, with evening exacerbations and irregular pulse, and sometimes convulsive fits.

Wormseed. See *Artemisia santonica.*

Wormwood. See *Artemisia absinthium.*

Wormwood, mountain. The *Artemisia glacialis*, of Linnæus, which is common about the Alps, and similar in its virtues to the common wormwood.

Wormwood, Roman. See *Artemisia absinthium.*

Wormwood, sea. See *Artemisia maritima.*

Wort. An infusion of malt. This has been found useful in the cure of the scurvy. Dr. Macbride, in his very ingenious experimental essays, having laid down as a principle, "that the cure of the scurvy depends on the fermentative quality in the remedies made use of," was led to enquire after a substance capable of being preserved during a long sea voyage, and yet containing materials by which a fermentation might occasionally be excited in the bowels. Such an one appeared to him to be found in malt, which is well known to be the grain of barley, brought suddenly to a germinating state by heat and moisture, and then dried, whereby its saccharine principle is developed, and rendered easy of extraction by watery liquors. The sweet infusion of this he proposed to give as a dietetic article to scorbutic persons, expecting that it would ferment in their bowels, and give out its fixed air, by the antiseptic powers of which the strong tendency to putrefaction in this disease might be corrected.

It was some time before a fair trial of this proposed remedy could be obtained; and different reports were made concerning it. By some cases, however, published in a postscript of the second edition of the doctor's work in 1767, it appears that scorbutic complaints of the most dangerous kind have actually been cured at sea by the use of wort. Its general effects were to keep the patient's bowels open, and to prove highly nutritious and strengthening. It sometimes purged too much, but this effect was easily obviated by the tinctura thebaica. Other unquestionable cases of its success in this disease are to be seen in the London Medical Essays and Enquiries.

The use of wort has hence been adopted in other cases where a strong putrid disposition in the fluids appeared to prevail, as in cancerous and phagedenic ulcers; and instances are published in the fourth volume of the work abovementioned of its remarkable good effects in these cases.

As the efficacy of the malt infusion depends upon its producing changes in the whole mass of fluids, it is obvious that it must be taken in large quantities for a considerable length of time, and rather as an article of diet than medicine. From one to four pints daily have generally been directed. The proportion recommended in preparing it, is one measure of ground malt to three equal measures of boiling water. The mixture must be well stirred, and left to stand, covered three or four hours. It should be made fresh every day.

Woundwort. See *Laserpitium chironium.*

Wrist, bones of. See *Bones.*

X,

Xala'ppa. (From the province of Xalappa in New Spain, whence it comes.) Jalap.

XA'NTHIUM. (From ξανθος, yellow; so named because it is said to make the hair yellow.) The lesser burdock. This herb, *Xanthium strumarium*, of Linnæus, was once esteemed in the cure of scrophula, but, like most other remedies against this disease, proves ineffectual. The seeds are administered internally in some countries against erysipelas.

Xa'nthium struma'rium. The systematic name of the lesser burdock. See *Xanthium.*

XERA'SIA. (From ξηρος, dry.) An excessive tenuity of the hairs similar to down.

Xerocolly'rium. (From ξηρος, dry, and κολλυριον, a collyrium.) A dry collyrium.

Xeromy'rum. (From ξηρος, dry, and μυρον, an ointment.) A dry ointment.

Xerophtha'lmia. (Ξηρος, dry, and οφθαλμια, an inflammation of the eye.) A dry inflammation of the eye without discharge.

Xi'phium. (From ξιφος, a sword; so named from the sword-like shape of its leaves.) Spurge-wort.

XIPHOID. (*Xiphoides*, from ξιφος, a sword, and ειδος, likeness.) A term given by anatomists to parts which had some resemblance to an antient sword, as the xiphoid cartilage.

Xiphoid cartilage. See *Cartilago ensiformis.*

Xyloa'loes. See *Lignum aloes.*

Xyloba'lsamum. See *Amyris gileadensis.*

Y.

YAM. See *Dioscorea.*

Yarrow, common. See *Achillea millefolium.*

Yaws. The African name for raspberry. See *Frambœsia.*

Yellow fever. See *Febris continua.*

Yellow saunders. See *Santalum album.*

YEST. *Cerevisiæ fermentum.* It is the scum which collects on beer while fermenting, and has the property of exciting that process in various other substances. Medicinally it is antiseptic and tonic; and has been found useful internally, as well as in making the fermenting cataplasm.

Yorkshire sanicle. See *Pinguicula.*

YPSILOGLO'SSUS. (From υψιλοειδες, the ypsiloid bone, and γλωσσα, the tongue.) A muscle originating in the ypsiloid bone, and terminating in the tongue.

YPSILOI'DES. (From υ, the Greek letter, called ypsilon, and ειδος, a likeness.) The os hyoides, so named from its likeness to the Greek letter ypsilon.

YTTRIA. The heaviest of the earths. Its specific gravity is 4.842. It resembles glucine in several of its properties. It is smooth and insipid. It is infusible alone, but vitrifies with borate of soda. It combines with the acids, and is precipitated from those solutions by ammonia and prussiate of potash. It is also precipitated by tannin. The precipitate is not soluble in acetic acid. As some of its salts are coloured, and its weight nearly approaches to that of metals, it is considered as the link which connects the metals with the earths. It differs from glucine in not being soluble in fixed alkalies, nor being precipitated by the succinates. Its attraction for the acids is also generally stronger than that of glucine, and its saline compounds have not the same saccharine taste. Its other properties have not yet been examined.

Z.

ZA'CCHARUM. See *Saccharum.*

ZACCHIA, PAOLO, an eminent physician, was born at Rome in 1585, and became distinguished by his learning and accomplishments, as well as by his professional skill. He was physician to pope Innocent X., and celebrated among his contemporaries by various publications, of which the principal is entitled "Quæstiones Medico-legales," and has been often reprinted. He was also the author, in Italian, of two esteemed works, on the Lent diet, and on hypochondriacal affections. He died in 1659.

ZA'FFRAN. (Arab.) Saffron.

ZAI'BAC. (Arab.) Quicksilver.

ZA'RZA. An ancient and provincial name of the sarsaparilla.

ZE'A MAYS. The systematic name of the Indian wheat plant, a native of America, and cultivated in Italy and several parts of Europe, for its grain, which is ground for the same purposes as our wheat, to which it is very little inferior.

ZEDOA'RIA. 1. The name of a genus of plants, in the Linnæan system. Class, *Monandria.* Order, *Monogynia.* Zedoary.

2. The pharmacopœial name of the *Kæmpferia rotunda*; which see.

ZEDOA'RIA LO'NGA. The long roots of the *Zedoaria rotunda*, of Linnæus.

ZEDO'ARIA ROTU'NDA. The systematic name, according to some, of the zedoary plant. See *Zedoaria.*

Zedoary. See *Zedoaria.*

ZE'RNA. An ulcerated impetigo. Lepra.

ZI'BETHUM. (From *Zobeth*, Arab.) *Civetta.* Civet. A soft unctuous odoriferous substance about the consistence of honey or butter, of a whitish, yellowish, or brownish colour, sometimes blackish, contained in some excretory follicles near the anus of the *Viverra zibetha*, of Linnæus. It has a grateful smell when diluted, and an unctuous subacrid taste, and possesses stimulating, nervine, and antispasmodic virtues.

ZIMMERMAN, JOHN GEORGE, was born in 1728, at Brug, in the canton of Bern, and studied medicine under Haller at Gottingen, where he took his degree at 23. Having married a relation of Haller at Bern, he settled as a physician in his native town; the retirement of which gave him an opportunity of composing many pieces in prose and verse, and particularly a sketch of his popular work "On Solitude." His treatise "On the Experience of Medicine," appeared in 1763, and three years after that on dysentery. In 1768 he accepted the post of physician to the king of England for Hanover, whither he removed. Here the accumulation of business tended in some measure to allay the irritability of his temper; and being obliged, about three years after, to put himself under the care of a surgeon at Berlin for some local complaint, the notice that was taken of him, even by the king, contributed much to improve his health and spirits, and of course his happiness. Having lost his first wife, he formed a second matrimonial connection in 1782; which helped much to alleviate the afflictions to which he was afterwards exposed. In 1786 he was sent for to attend the great Frederick in his last illness; and he published an account of the conversations which he had with that celebrated prince. He was led, too, to defend the character of Frederick against the censures of count de Mirabeau, which subjected him to severe criticisms. His political and religious principles induced him also to attack those societies which paved the way to the French revolution; and he advised the emperor Leopold to suppress them by force: and having laid an unavowed publication to the charge of a particular person, he subjected himself to a prosecution for a libel. His mind had arrived to such a state of irritation, that the approach of the French towards Hanover almost subverted his reason: he abstained from food, and died absolutely worn out in 1795.

ZINC. (*Zincum*, Germ.) A metal found in nature combined with oxygen, carbonic acid, and sulphuric acid; and mineralized by sulphur. Native oxyde of zinc is commonly called *calamine*. It occurs in a loose, and in a compact form, amorphous, of a white, grey, yellow, or brown colour, without lustre or transparency. Combined with carbonic acid, it is called *vitreous zinc ore*, or *native carbonate of zinc*. It is found in solid masses, sometimes in six-sided compressed prisms, both ends being covered with pentagons. Its colour is generally greyish inclining to black. It is often transparent. *Sulphate of zinc* is found efflorescent in the form of stalactites or in rhombs. *Sulphuret of zinc*, or *blende*, is the most abundant ore. It is found of various colours; brown, yellow, hyacinth, black, &c., and with various degrees of lustre and transparency. This zinc ore is contaminated with iron, lead, argillaceous and siliceous earths, &c. It occurs both in amorphous masses and crystallized in a diversity of polygonal figures.

Properties of Zinc.—Zinc on its fracture appears of a shining white colour, with a blueish tint. It possesses some degree of ductility, and may be extended when carefully passed between metallic cylinders in a flatting mill. Its specific gravity is 7.190. It melts about 680° Fahr. By a farther increase of heat it is volatilized without change. When melted in contact with the air, its surface becomes covered with an imperfect oxyde; when heated a little above ignition it burns with a bright yellowish white flame, slightly tinged with green, and a white oxyde is formed in light flakes, which are carried off by the rapid current of air over the burning metal. It undergoes very little alteration from the air, its surface becomes slightly tarnished. It is not acted on by water at the usual temperature of our atmosphere, but at that of ignition, it decomposes this fluid rapidly. It is oxydized and dissolved by the greater number of the acids. It has a very strong attraction for oxygen, and therefore precipitates the greater number of the metals from their acid solutions. All the alkalies, when digested or boiled with zinc, blacken its surface, and dissolve a minute portion of it. It decomposes muriate of ammonia, sulphate of potash, and various other neutral salts. A mixture of nitrate of potash and zinc detonates with rapidity. Sulphur and zinc cannot be united by fusion. Gold, silver, platina, and nickel form brittle compounds with zinc. It easily unites with mercury and tin. It does not combine with lead or bismuth. The most frequent, and at the same time most useful, combination of zinc is that with copper. It unites with great difficulty to arsenic, iron, and cobalt. It inflames in oxymuriatic acid gas, and fulminates by pressure or a blow with hyperoxymuriate of potash. It is a very strong conductor of galvanism. The use of zinc in the arts is very considerable. In medicine the sulphate of zinc, or white vitriol, is the preparation most employed. See *Zinci sulphas.*

Zinc, vitriolated. See *Zinci sulphas.*

ZI'NCI O'XYDUM. *Zincum Calcinatum.* Oxyde of zinc. Flowers of zinc. *Nihil album. Lana Philosophorum.* "Throw gradually little pieces of zinc into a large deep crucible placed obliquely and made of a white heat, another crucible being placed over it, so that the zinc may be exposed to the air, and that it may be frequently stirred with an iron spatula; take out directly the oxyde, which is formed from time to time; then pass the white and lighter part of it through a sieve. Lastly pour water upon this, that a very fine powder may be formed in the same manner, as chalk is directed to be prepared." The properties of this oxyde are analogous to those of the sulphate, (except that it is hardly active enough to excite vomiting,) if given in larger doses: but it is more precarious in its effects; and chiefly used at present as an external astringent.

ZI'NCI SU'LPHAS. *Zincum vitriolatum. Vitriolum album.* Sulphate of zinc. White vitriol. This occurs native, but not sufficiently pure for medical use. It is thus prepared in the pharmacopœia. "Take of zinc, broken to little pieces, three ounces; sulphuric acid, by weight, five ounces; water four pints. Mix them in a glass vessel, and when the effervescence is over, filter the solution through paper; then boil it down, *till* a pellicle appears, and set it by to crystallize." This preparation is given internally in the dose of from Əj to ʒss, as a vomit. In small doses it cures dropsies, intermitting head-aches, and some nervous diseases; and is a powerful antispasmodic and tonic. A solution of white vitriol is also used to remove gleets, gonorrhœas, and for cleaning foul ulcers, having an astringent or stimulant effect, according to its strength.

ZI'NCUM. See *Zinc.*

Zi'ncum calcina'tum. See *Zinci Oxydum.*

Zi'ncum vitriola'tum. See *Zinci sulphas.*

Zi'ncum vitriola'tum purifica'tum. See *Zinci sulphas.*

Zi'ngi. An antient name of the stellated aniseed. See *Illicium anisatum.*

ZI'NGIBER. (Ζιγγιϐερις, Indian.) *Zingiber album. Zingiber nigrum. Zingiber commune. Zinziber.* Ginger. *Amomum zingiber*, of Linnæus. The white and black ginger are both the produce of the same plant, the difference depending upon the mode of preparing them. Ginger is generally considered as an aromatic, and less pungent and heating to the system than might be expected from its effects upon the organ of taste. It is used as an antispasmodic and carminative. The cases in which it is more immediately serviceable are flatulent colics, debility, and laxity of the stomach and intestines; and in torpid and phlegmatic constitutions to excite brisker vascular action. It is seldom given but in combination with other medicines. In the pharmacopœias it is directed in the form of a syrup and condiment, and in many compositions ordered as a subsidiary ingredient.

Zi'ngiber a'lbum. The root of the *amomum zingiber*, of Linnæus, is so termed when deprived of its radicles and sordes.

Zi'ngiber commu'ne. See *Zingiber.*

Zingi'ber ni'grum. The root of the *Amomum zingiber*, of Linnæus, is so called when suffered to dry with its radicles and the sordes which usually hang to it.

ZINN, John Godfrey, was born in 1726, studied under Haller at Gottingen, and became botanical professor in that university. His first experiments were undertaken, to ascertain the sensibility of different parts of the brain; he then proceeded to the examination of the eye, on which he published a work in much estimation. The result of his botanical labours appeared in several papers, and in a catalogue of the plants about Gottingen, arranged according to the plan of his preceptor. He died prematurely in 1758. He was a member of several learned societies.

Zi'nziber. See *Zingiber.*

ZIRCON. An earth discovered in the year 1793, by Klaproth of Berlin, in the Zircon or Jargon, a gem first brought from the island of Ceylon, but also found in France, Spain, and other parts of Europe. Its colour is either grey, greenish, yellowish, reddish-brown, or purple. It has little lustre, and is nearly opaque. Zircon is likewise found in another gem called the hyacinth. This stone is of a yellowish-red colour mixed with brown. It possesses lustre and transparency.

Properties. — Zircon has a white colour, is exceedingly heavy, and rough or harsh to the touch like silex. It has neither taste nor odour, and is insoluble in water, but forms with it a kind of jelly. It melts with borax into a transparent colourless glass. It suffers in a charcoal crucible a pasty fusion by intense heat, and contracts in its dimensions, acquiring a grey colour and scintillating hardness. In this state it is very hard and insoluble in acids. Its specific gravity is 4.3. Neither air nor combustible bodies act upon it. It is soluble in water, but retains while drying in the air a large quantity of it, which gives it the semi-transparency and appearance of a yellow jelly, or gum arabic; it exhibits the same vitreous fracture. It unites with all the acids and forms salts, differing from those of the other bases by being decomposable by alumine, glucine, the alkalis, and by mere heat. It fuses with alumine and silex. It is insoluble even by boiling in a solution of alkalis, neither can it be fused with them by means of heat; but it is soluble in alkaline carbonates.

By these properties this earth may be distinguished from every other. It is still of no use in the arts.

Method of obtaining Zircon. — Reduce the mineral to powder, mix it with three times its weight of potash, and fuse it in a crucible. Wash the obtained mass in distilled water, till the whole of the potash be extracted; then dissolve the residuum as far as possible in diluted muriatic acid. Boil the solution to precipitate any silex it may contain, filter it, and gradually add solution of potash. The zircon will now become precipitated. Wash it repeatedly in distilled water and dry it.

Ziza'nia aqua'tica. The systematic name of a reed whose grain is much esteemed. The *Water zizania* grows in the swampy parts of Jamaica and Virginia. The Indians are exceedingly fond of its grain, and account it more delicious than rice.

Zi'zyphus. The jujubes were formerly so called. See *Rhamnus zizyphus*.

Zo'na. (From ζωννυμι, to surround.) *Zoster*. The shingles.

ZOOLOGY. (*Zoologia*, from ζωον, an animal, and λογος, a discourse.) That part of natural history which treats of animals.

ZOONO'MIA. (From ζωον, an animal, and νομος, a law.) The laws of organic life.

ZOOTOMY. (*Zootomia*, from ζωον, an animal, and τεμνω, to cut.) The dissection of animals.

Zo'ster. (From ζωννυμι, to gird.) A kind of erysipelas which goes round the body like a girdle.

Zu'char. (Arab.) Sugar.

ZYGO'MA. (From ζυγος, a yoke; because it transmits the tendon of the temporal muscle like a yoke.) The cavity under the zygomatic process of the temporal bone, and os malæ.

ZYGOMATIC PROCESS. An apophysis of the os jugale, and another of the temporal bone are so called.

ZYGOMATIC SUTURE. *Sutura zygomatica*. The union of the zygomatic process of the temporal bone to the cheek bone.

ZYGOMA'TICUS MA'JOR. This muscle arises from the cheek bone near the zygomatic suture, taking a direction downwards and inwards to the angle of the mouth; it is a long slender muscle, which ends by mixing its fibres with the orbicularis oris and the depressor of the lip.

ZYGOMA'TICUS MI'NOR. This muscle arises a little higher up than the zygomaticus major, upon the cheek bone, but nearer the nose; it is much more slender than that muscle, and is often wanting. It is the zygomatic muscle that marks the face with that line which extends from the cheek bone to the corner of the mouth, which is particularly distinguishable in some persons. The zygomatic muscles pull the angles of the mouth up as in laughter, and from, in this way, rendering the face distorted, it has obtained the name of distortor oris. The strong action of this muscle is more particularly seen in laughter, rage, or grinning.

Zytho'gala. Ζυθογαλα. Beer and milk, which make together what we commonly call *posset-drink;* a term often to be met with in Sydenham.

zz. The antients signify *Myrrh* by these two letters, from ζμυρνη, a name for it common amongst them; but the late writers use them only for the *Zinziber*, ginger.

THE END.

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